LAW AND CONTEMPORARY PROBLEMS

TRANSPORTATION
Part I

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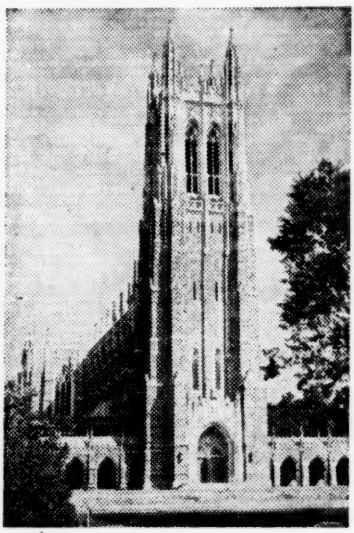

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FOREWORD

The transportation problems receiving most attention in recent months have concerned the movement of a few pounds of cargo from earth into outer space. Our eyes have turned to the heavens, and newspapers teem with accounts of the rigors of astronautics. However, it bears emphasis that, in the quest to devise new methods of propulsion away from Earth, we should not forget that transportation on this planet, and even on its American portion, still presents some substantial problems. At the risk of lagging in any "race for space" that may be under way among legal periodicals, the editors of *Law and Contemporary Problems* are devoting this and the next issue to a symposium on (strictly terrestrial) American transportation problems.

For space travel, planners have faced tremendous problems in the allocation of resources. Since funds are not illimitable, how much money shall be used to develop an Atlas missile, how much for a Saturn, and so forth? In like manner, determining the best allocation of physical and financial resources can be a perplexing problem in the sphere of earthbound transportation. Dr. Nelson takes the position that the resources available for transportation in the United States are not being exploited in the most advantageous way. As a partial cure, he suggests that a system of user charges be employed to place air, motor, and water carriers on the same level of competition with the railroads. Dr. Roberts's focus is on transportation prices and their relation to the flow of transportation resources. He contends that the present regulation of these prices is excessive and does not produce the best allocation of resources.

Not infrequently, coordination and cooperation can enhance the utility of existing resources—a fact that is reflected in the praise often bestowed on "teamwork." On the other hand, the existence of statutory prohibitions against conspiracies in restraint of trade suggests that some forms of cooperation are generally deemed baneful. Since various associations have long played a major role in the transportation industry—both in the United States and elsewhere—it becomes important, therefore, to determine what is the proper field of action for the conference composed of different carriers of the same type. For this determination, Professor Marx and Messrs. Seaver and Schmeltzer provide valuable guidance.

Not only cooperation between different carriers of the same type—such as shipping conferences, rail conferences, and the International Air Transport Association—but also coordination between different types of transportation agencies—rail-truck, air-mail, water-rail, and so forth—must be considered as means of best allocating transportation resources. Professor Melton's study of such coordination has led him to recommend that transportation companies be allowed to operate in two or more media. This, however, flies squarely in the face of the historic fear, voiced by Mr. Beardsley, that transportation companies, or any type of cross-ownership, would be simply a prelude to railroad extermination of other carriers.

Railroad spokesmen, taking the opposite tack, assert that the rail carriers today are more sinned against than sinning; and that the sin is of such enormity as to threaten the loss of the vast resources that the United States and its citizens have invested in the railroads. Thus, Mr. Mackie insists that the burden of discriminatory local taxation of the railroads has become crushing. And Messrs. Gidding and McKinnon suggest that tax reform at the federal level could also promote the health of the railroads, and of the transportation industry generally.

While government subsidy has provided some of the sinews of the American transportation system, private investment, as well, has played a major part. In the future, too, the amount of capital directed to the transportation industry, and among its various segments, will depend to a great extent on the decisions of private investors. Assuming that these investors bear any resemblance at all to the traditional *homo economicus,* their decisions will be greatly influenced by the rate of return available; and this will often hinge on the policies of regulatory agencies. This, then, sets the stage for Mr. Howell and Dr. Smith, who address themselves to the question of regulation of the rate of return to transportation agencies. Since the former writer is a financial consultant who recently made an extensive study for the CAB of airline rate of return and the latter is an airline executive, both of them, not unnaturally, center on the burning controversy about airline fares and do not reach identical conclusions.

Ours is a rich country; and yet—especially with today's vast demands for national defense, space exploration, research, and the like—it is not so wealthy that it can afford to squander its resources. Among the most significant of these resources is the national transportation plant. If this symposium can point the way to a better utilization of that plant, the editors feel that it will have rendered a worthwhile service.

ROBINSON O. EVERETT.

POLICY ISSUES AND ECONOMIC EFFECTS OF PUBLIC AIDS TO DOMESTIC TRANSPORT

JAMES C. NELSON*

I

THE CURRENT ISSUES OVER PUBLIC AIDS IN DOMESTIC TRANSPORT

In the United States, government shares with private enterprise the risks and costs of providing transport supply in a mixed system of public and private enterprise. In general, although a variety of promotional devices have been used, government furnishes the basic ways (and terminals in some cases), while private carriers supply the equipment, organization, and working capital essential to carrier operations over public facilities. This mixed enterprise is characteristic of air, highway, and water transport, but not of pipeline and railway transport, fields in which private enterprise accepts the responsibility of providing both way and carrier facilities. As most countries operate their railways under public enterprise, this country's particular mix of private and public enterprise in transport is unique.

As a broad generalization, one that subsequently must be qualified in important respects, it can be said that the American system of mixed enterprise in transport (with its relatively heavy emphasis on private enterprise) has worked tolerably well. It has produced a fully-developed, large-scale, multi-service, and essentially competitive transport system that appears the envy of most countries. However, Europeans often question whether automobiles and expressways can ever, by themselves, provide a solution for urban congestion, and observers from underdeveloped countries wonder how a country can afford the large amount of route and agency duplication involved in the American transport system.

Nevertheless, the American policy of directly providing basic facilities, such as airways and inland waterways, and of financially aiding the states to furnish airport and highway facilities has not escaped severe and widespread internal criticism. Today, almost no one questions the desirability of public spending for the airways, airports, highways, and waterways. But increasingly the question has been raised whether it is economically desirable to furnish any of the carrier groups with the ways and terminals they require entirely free of charge, as in the case of inland waterways, or at user charges that may be inadequate to cover all relevant resource

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costs involved in rendering way or terminal services to carriers. Stated more pointedly, the critical questions are: Is there a continuing economic justification for the grant of subsidies to certain or all of the classes of carriers that depend on public transport facilities? Is it now feasible to have the full economic advantages that the American mixed system of transport can yield, while assessing appropriate user charges against all carriers using public way and terminal facilities? If the differential grant of subsidies is continued along with other questionable policies, what will be the ultimate social costs in terms of loss of essential and efficient transport plant not receiving the benefit of public subsidy? Specifically, is the deteriorating condition of the privately-owned railroads during a long period of postwar prosperity attributable to any important extent to the direct and indirect subsidies given the expanding transport agencies that rely on public facilities as essential plant for their vehicular operations?

These issues are not new in American transport. But as the aggregate volumes of annual public investment in airway, airport, highway, and waterway facilities have been expanding rapidly, while railway investment has lagged, they have become more urgent, and the day has drawn closer when reasonable solutions must be found. Rightly or wrongly, many observers have arrived at the conclusion that a connection exists between the rising levels of public expenditures for alternative transport facilities (including the generous terms quoted to carriers for their use) and the high and rising level of rail freight rates, the recurring shortages of freight cars, the decisions of prominent eastern railroads to disinvest in basic line capacity, the rising passenger deficits, and the worrisome discontinuance of commutation train services.[1] At any rate, the enactment of the Transportation Act of 1958[2] was concrete evidence of the growing public concern over the long-term consequences of the declining position of the railroads. It also reflects the underlying issue whether railway decline represents ordinary technological substitution bringing superior service, lower costs, and more adequate transport supply for the needs of commerce as a whole, or whether it represents an uneconomic consequence of overexpanded government investment in transport facilities, subsidies to some competing agencies but not to others, and regu-

[1] The concentration of this article on the problem of transport subsidies should not be construed to imply that it is the writer's view that the long-term and postwar relative decline of the railroads is wholly or even principally due to the effects of subsidies to air, highway, and water transport. Of course, other reasons exist for much of the huge traffic diversions from the railroads in recent years, such as the long-standing inadequacies of rail pricing in relation to rail unit costs and competitive conditions, the restrictive effect of regulation on competitive rate making, superior service by air and motor carriers, and lower unit costs (even with government subsidies figured in) for some hauls and services. For a full statement of the basic elements in railway decline, see JAMES C. NELSON, RAILROAD TRANSPORTATION AND PUBLIC POLICY (1959). *Cf.* JOHN R. MEYER, MERTON J. PECK, JOHN STENASON, & CHARLES ZWICK, THE ECONOMICS OF COMPETITION IN THE TRANSPORTATION INDUSTRIES 65-85, 122-26, 139-44, 148, 166-96, 238-52, 265-69 (1959).

[2] 72 Stat. 568, 49 U.S.C.A. §§ 1231-40 (Supp. 1958). See also Senate Comm. on Interstate and Foreign Commerce, *Transportation Act of 1958*, S. REP. No. 1647, 85th Cong., 2d Sess. (1958); House Comm. on Interstate and Foreign Commerce, *Transportation Act of 1958*, H.R. REP. No. 1922, 85th Cong., 2d Sess. (1958). S. Res. 303, 85th Cong., 2d Sess., 104 CONG. REC. 8370 (1958), authorized the Senate Interstate and Foreign Commerce Committee to investigate a number of transport policy questions, including public aids and user charges for public transport facilities.

latory policies preventing or slowing the market and price adjustments of the railroads to the growing competition which they face (and which is in prospect) from alternative agencies differentially enjoying the benefits of government provision of their ways and/or terminal facilities.

The problem of subsidies in transport is far too vast and complicated for full statistical treatment in this article. This discussion is limited to viewing the subject in general terms in the light of present-day conditions, rather than to presenting a complete historical and quantitative account, such as was done two decades or so ago by the Federal Coordinator of Transportation and the Board of Investigation and Research.[3] Special attention will be given to ascertaining whether it makes economic sense to continue traditional areas of subsidy to some transport agencies more or less indefinitely, and whether it is now feasible for the federal government to adopt a policy of universal user fees. Throughout, the long-term economics of the subject will be stressed, rather than the acquisitive, regional, or income-distributional effects of subsidies. The basic assumption made is that the objective of national transport policy, to be economic, must be to encourage the development of a transport system capable of minimizing the total costs in scarce resources required for producing continuously and adequately the mix of transport services demanded at prices that are closely related to the costs of supplying those services. Hence, public aids will be discussed in terms of their contribution or lack of contribution to that over-all objective.

II

THE HISTORICAL POLICY OF PUBLIC AIDS TO TRANSPORT

With the exception of the pipelines, all domestic transport agencies and the American shipping lines and airlines in international commerce have received subsidies from government at some time during their development. It will, therefore, be instructive to note the kinds of aids granted, the purposes established for them, the conditions attached, and the resulting social gains achieved.

During the nineteenth century, certain western and southern railroads were beneficiaries of federal land grants (and of other state and federal aids), extended to encourage initial construction of rail lines into areas without efficient transport service and into virgin western regions; in return, the land-grant railroads were obligated to quote land-grant rate reductions for transportation of mail, troops, and govern-

[3] See FEDERAL COORDINATOR OF TRANSPORTATION, PUBLIC AIDS TO TRANSPORTATION (1938-40); Board of Investigation and Research, *Public Aids to Domestic Transportation*, H.R. Doc. No. 159, 79th Cong., 1st Sess. (1945); Board of Investigation and Research, *A Report on Carrier Taxation*, H.R. Doc. No. 160, 79th Cong., 1st Sess. (1945). The terms "subsidy" and "public aid" are used interchangeably to mean both the grant of money and the provision of facilities or services by government without requiring fully compensatory payments. Public expenditures for transport facilities do not necessarily result in public aids or subsidies; they do, however, to the extent that uncompensated costs result from a complete lack of user fees, from inadequate user charges, or from grants of money or land that are not repayable. See Board of Investigation and Research, *Public Aids to Domestic Transportation*, H.R. Doc. No. 159, 79th Cong., 1st Sess. 52-55 (1945).

ment property (an obligation that continued until October 1, 1946).[4] Earlier, canals had been constructed by state agencies and furnished to water carriers at tolls designed to recover capital and operating costs; however, since about 1880, by which time the railroads had largely superseded the canals, the federal and state governments have provided improved waterways to the barge lines entirely free of user charges, except on the recently completed St. Lawrence Seaway, an international facility. Even earlier, private turnpikes supplied improved main highways on a commercial basis; but since the decline of turnpikes after 1850, the provision of highways has been the responsibility of the state and local governments, with the federal government granting ever-increasing aid (since 1916) for construction of limited federal-aid systems of state, municipal, and county highways.[5] However, almost from the beginning of the modern highway movement around the turn of this century, motor vehicle owners have been assessed user fees (registration fees at first, and then motor fuel and other special taxes) for use of the public highways. Finally, the federal government undertook to provide the civil airways in the early days of air transport, and even today furnishes the airways to aircraft operators without explicit user fees (although an excise tax of two cents a gallon on aviation gasoline is paid to the federal government). And for many years, federal air-mail subsidies have been awarded to the domestic and international airlines, although they no longer are given to the domestic trunk lines which carry a very large proportion of the traffic. In addition, local government, with federal aid, furnishes essential airport facilities, assessing the airlines user charges that, however, have not been sufficient, along with other sources of airport revenues, to make public airports self-supporting enterprises.[6]

Over the years, tremendous sums have been spent by government in making way and terminal facilities available for use by private carriers, in giving direct subsidies to certain classes of carriers, and in engaging in expensive scientific research and development for national security—one result of which has been that much valuable technology has become available to the air carriers without their having to finance other than the cost of its adaptation to civil aviation.[7]

In a study recently published by the Brookings Institution, the present writer estimated that the aggregate federal spending (of which only a part represented subsidies) for air, highway, and water facilities and services (not adjusted for changes

[4] For a brief review of state and federal aids to the railroads, including federal land grants during 1850-71, see D. PHILIP LOCKLIN, ECONOMICS OF TRANSPORTATION 100-19 (1954); Henry, *The Railroad Land Grant Legend in American History Texts*, 32 MISS. VAL. HIST. REV. 171 (1945). The reduced-rate obligation continued until it was repealed by the Congress in 1946; by that action, the Congress recognized that more than full compensation had been made for the federal grants of land to certain railroads. The total of all land-grant rate reductions (including voluntary equalization of rates by competing roads) to June 30, 1943, was estimated to be $580,000,000, a sum several times the value of the granted land at the time land grants were awarded and in excess of the sums derived by the railroads from the grants.

[5] LOCKLIN, *op. cit. supra* note 4, at 75-87, 750-68.

[6] NELSON, *op. cit. supra* note 1, at 93-107.

[7] Statement of Burton N. Behling, in Railroad Passenger Train Deficit, No. 31954, ICC, Feb. 18, 1958, pp. 7-16.

in the value of the dollar) amounted to $43,000,000,000 through fiscal 1958. That total included the $16,900,000,000 of expenditures for the merchant marine for emergency ship construction during two world wars and for mail or construction and operating differential subsidies. Without that component for international shipping facilities and services, total federal expenditures for domestic transport facilities amounted to $26,100,000,000 through fiscal 1958. Of that total, the greatest amount, $17,500,000,000, went for highway development; the second largest amount, $5,400,000,000, for inland waterway development (excluding $95,700,000 expended for the St. Lawrence Seaway); and the third largest amount, $3,200,000,000, for civil airways and airports and for mail subsidies to air carriers.[8] In addition, expenditures for highways by state and local governments in recent decades have greatly exceeded the total federal aid for highways, and probably even the aggregate federal expenditures for all types of civil transport facilities. In contrast, total federal grants to the railroads, in large part the value of granted land, amounted to only $1,400,000,000.[9]

The national purposes for giving financial assistance in behalf of transport development are relevant in any evaluation of that policy. Clearly, grants to the railroads had the somewhat unique national objective of initially stimulating settlement and use of the undeveloped lands in the West by means of rapid introduction of a new transport technique capable of substantially reducing the cost of long-distance transport and of improving the speed of service. On the other hand, most merchant-marine expenditures have been for the purpose of increasing the supply of ships for military needs during World Wars I and II and of maintaining, during peace periods, sufficient merchant ships, shipbuilding and repair facilities, and trained personnel for any military eventualities that might arise. Aids to air transport sought to improve postal communication and to hasten the introduction of a new means of transport capable of unique speeds of service, as well as to assure adequate equipment, aircraft-manufacturing facilities, and skilled personnel for national defense. Federal aid to highways had as its principal purposes the improvement of rural postal services and the promotion of interstate commerce through stimulating competitive transport; in addition, there has always been an underlying national defense interest in a highly developed system of interstate highways based on the needs of commerce and, therefore, generally adequate for the needs of the military in time of war. State and local investment in modern highways has largely been in response to the way-service demands of a rapidly multiplying ownership of motor vehicles, as the willingness of user groups to pay user fees and a growing proportion of total highway costs attests. The principal objectives for federal channelization of the inland waterways, including the no-toll policy, have been to give some landlocked areas

[8] NELSON, *op. cit. supra* note 1, at 67-71. It is recognized that price levels have changed and that population and traffic have grown during the century since the land grants were awarded certain railroads to encourage construction. It is also recognized that comparison of the ratios of public expenditures and grants for transport facilities to gross national product at different historical periods might be pertinent.

[9] CHARLES L. DEARING & WILFRED OWEN, NATIONAL TRANSPORTATION POLICY 11 (1949).

(principally the Mississippi Valley) lower freight rates than the railroads would otherwise have quoted (even under ICC regulation) and to furnish additional competition against the pre-1930 monopoly power of the railroads; and as in the case of the other agencies, there was also some military interest in having these supplementary facilities in time of war.[10]

Except in the special case of the merchant marine, the over-all historical record indicates that perhaps the strongest motive for federal transport subsidies has been to bring about more rapidly than otherwise would occur the economic and social benefits of improvements in transport service and lowered transport costs when entirely new transport technology became available. This was true of federal aids for highway and air-transport development. That objective was also a prominent reason for the land grants to certain railroads decades ago, but with the significant difference that a century ago far greater emphasis was necessarily placed on land settlement and general economic development of the vast resources of pioneering areas. The introduction and rapid expansion of modern air, highway, and waterway transport came after a complete and efficient railway system had been established by private capital, with some reimbursable aid (land-grant rate reductions) from the government, and long after the railroads had already opened up most of the remote and undeveloped regions of this country for rapid settlement and population growth. It follows that the public aids given to the newer forms of transport have largely been premised on improving transport with service innovations and through promoting additional competition. This is not to say that public promotion of airways and airports, highways, and waterways did not somewhat expand the extensive margins of land use nor contribute to national economic growth. It rather implies that the basic problem has long ago changed from the establishment for the first time of a superior means of transport over wide areas in order to promote general economic development, to the problem of assisting in the introduction of new modes of transport as they appeared on the scene, with the purpose of refining the existing well-developed system with new services, coordinated transport, and in some traffic areas with less costly service in terms of resource costs. In other words, the grant of subsidies to air, highway, and waterway transport was intended to speed the development of those modes over the normal rate which market demand would in time have stimulated, in order that the economy might earlier enjoy the benefits of new types of services, new technologies of transport, and competitive transport organization.

According to some authorities, federal transport promotion has achieved good long-term results on the whole.[11] Thus, grants to the railroads stimulated a rapid spatial development in the nineteenth century by encouraging efficient regional specialization on the basis of reductions in transport costs and improvements in serv-

[10] *Id.* at 12, 81-94, 236-65. It should be pointed out that students of transport have long recognized that subsidized waterways cannot be an effective regulator of railroad rates generally; and that while such "free" improvements confer advantages on some otherwise landlocked areas, they discriminate against landlocked areas which have no access to waterways, actual or potential.

[11] *Id.* at 12-13.

ice much earlier than would otherwise have occurred. Federal aid to highways fostered a rapid and high development of the principal interstate highway routes (along with a large mileage of highways of lesser significance in recent years); it also induced early adoption of scientific highway management and planned highway development. Although the contribution of motor transport to the economy is harder to evaluate than that of the railroads, the steady emergence of competitive transport markets after about 1920 is one of the most noteworthy contributions of motor transport and modern highways. Air transport, whose amazing growth has clearly been expedited by the pioneering government operation of the original airlines,[12] government provision of airways and airports, the grant of air-mail subsidies, and by strong federal regulation of airline safety standards, has also added competitive elements in transport. However, air transport's chief contribution has been its tremendous speed of service, benefiting postal communication, travel, and the shipment of high-grade commodities alike. This century's waterway development has added additional competitive elements and has given the particular areas favored with waterways a low-priced but subsidized service for bulk and special commodities.

Both the subsidies to the merchant marine and those given to commercial air transport have contributed importantly to the supply of facilities, equipment, and trained personnel that have been critically needed in recent wars. However, although national defense needs may justify continuing subsidies to maintain a merchant marine larger than the commercial market would supply, it cannot be overlooked that without such subsidies, the privately-owned railroads and pipelines (including the government-constructed Big Inch and Little Big Inch lines, now in private ownership) also made highly significant contributions to essential transport supply during World War II. The intercity highway carriers played a lesser but important role in the war effort, even though they had long been required by the states to make substantial user fee contributions in support of the public facilities over which their vehicles operate. Accordingly, a significant conclusion to be drawn from history is that when domestic transport agencies have been in adequate supply for the normal needs of commerce, their capacity has also generally been sufficient for wartime and defense needs, although some special coordination and rationing in terms of wartime essentiality criteria and some minor adjustments in supply to accommodate special defense needs have been required. The contribution of the domestic transport industries to wartime economies indicates that, aside from the case for subsidies to encourage the initial development of brand new modes of transport, or for action to overcome an unbalanced development of transport facilities due to the effects of public policies, there is no need for continuing subsidies to any domestic field of transport in order to have adequate facilities for military needs.[18]

[12] JOSEPH L. NICHOLSON, AIR TRANSPORTATION MANAGEMENT 7-18 (1951).

[18] *Cf.* Harbeson, *Transportation: Achilles Heel of National Security*, 74 POL. SCI. Q. 1 (1959).

Beyond question, then, government has made a truly important contribution to development of the superb and highly-refined American transport system. But as government promotion has also created excessive transport facilities and economic distortions, this by no means implies that all is well or that the best and most efficient system has resulted from the combined efforts of government and private enterprise. Nor does it logically mean that the policies of the past should be continued indefinitely without change. However, continuing subsidies may be essential to assure a sufficient and modernized supply of overseas shipping facilities.

When one looks objectively at the problem of the justification for subsidies to domestic transport, it is clear that all of the historical reasons, excepting political and pressure-group demands, have disappeared long ago in most cases. Clearly, there is no present need for land grants or equivalent aid to stimulate an initial development of a rail system, although a serious lag in rail investment in terms of modernization and additional equipment has long been cause for public concern. Highway motor transport is now a mature and thriving industry, and principal highway routes with high-type surfaces have been established throughout the land. Although expanding traffic and congestion in and near cities obviously require much highway expansion and modernization, plainly there is no longer any need for public subsidies from general tax funds in order to introduce the advantages of this technique of transport to the American economy. Very likely, most economically-needed highway development would come as rapidly as can be justified, considered competing needs for scarce resources and consumers' preferences for all goods and services, on the basis of effective demand, if user fees and tolls were adjusted appropriately and if the principle of user support of highways were applied more fully and insistently. The quick additions to expensive and superior highway supply in congested areas by the state-owned toll road authorities appear to indicate that the required facilities would come sooner on that commercial basis of organization than under the existing so-called free-road policies.

Air transport, too, can no longer be regarded as an infant industry in need of continuing subsidies to assure its development, except for the somewhat non-economic case that has been made for subsidizing the local and metropolitan airlines to give rural areas and urban communities more of the advantages of the air age. It is noteworthy that the rapid introduction of new technology in air transport did not cease, or even slacken, nor did rapid growth stop, with cessation of air-mail subsidies to the significant trunk lines. Witness the 1958-59 introduction of pure jet transports. Despite a natural disinclination by the airlines to make adjustments to increased costs when a way can be found to avoid them, it is doubtful that placing explicit and adequate user fees on the civil airways over a period of time would seriously impede beneficial innovations in that industry. The great growth of the traffic of barge lines serving ports on the well-located inland waterways would seem to indicate that free channel and lock services are no longer essential to intensive use of such facilities. In the case of marginal waterways, the traffic does not develop

to high levels even without user fees, a situation that has raised serious questions about the economic justification made for some waterways and the legislative decisions to invest in them.

Manifestly, the conditions that originally prompted adoption of the particular subsidy and promotional policies chosen in the pioneering phase of this country's development and during the early years of the development of each of the transport industries (except the pipelines) no longer obtain. This does not mean that government should withdraw altogether from promotion of transport agencies; rather it should comprehensively review its historic promotional policies in order to bring them in line with the present-day needs of commerce, the postal service, and national defense. Obviously, there is no reason to withdraw from government ownership and investment in airways, airports, highways, and inland waterways, as these are all widely-accepted governmental business functions. However, the greatly changed conditions in transport since the original subsidy policies were initiated, the urgent need for achieving greater over-all economy in transport, and the many competing claims for general tax revenues at both federal and state levels logically argue for the total elimination of subsidies to so-called infant transport industries that clearly have developed into market and traffic adulthood and have been competing vigorously and successfully with the privately-owned agencies not enjoying continuing and equalizing subsidies but, in contrast, having to bear both the overhead costs of way investments and a full load of taxes on their way facilities.

III

THE EFFECTS OF PUBLIC AIDS UPON THE CURRENT TRANSPORT SITUATION

The beneficial general results of this country's policy of stimulating economic development through encouraging adequate and efficient transport and by fostering technical innovation and competition in transport refer to a long-term historical period during which all of our modern transport agencies have evolved from the stage of experimentation and infancy into mature industries. Those gains, along with tremendous economic wastes from overdeveloped facilities on many routes and from encouragement of traffic flows over high-cost agencies,[14] have long ago been achieved. Today, the problem of transport policy is radically different than in the 1830-1930 period. Insufficient attention has been given to this fact in formulating promotional and regulatory policies in recent years.

The transport problem today and in the foreseeable future is to promote the right economic development of each of the five contending agencies, including that of the several classes of carriers and of coordinated services by two or more classes of carriers. No longer can the primary aim of policy be to foster initial economic development of the western regions through establishing effective transport supply

[14] DEARING & OWEN, *op. cit. supra* note 9, at 13-15; Merton H. Miller, Price Discrimination in the Railway Industry, 1952 (unpublished Ph.D. dissertation in Johns Hopkins University Library); MEYER, PECK, STENASON, & ZWICK, *op. cit. supra* note 1, chs. VI and VII.

(except for the new state of Alaska[15]), or even to hasten the introduction of new transport industries by means of temporary or continuing subsidies. This is not to say that modes of transport now not visualized will never be invented nor appear on the market horizon. Considering the dynamics of the space age, it is conceivable that new transport methods, superior to existing ones, are now in the making. However, the present-day policy-makers, and, indeed, the entire citizenry, currently face well-defined and critical transport questions growing out of the existing relations among agencies and carriers, the current promotional and regulatory policies, and the present structure of transport. Thus, it would seem wholly reasonable to give priority to such issues, leaving the question of what subsidies may be desirable for promoting rapid development of any new mode of transport to be dealt with after someone invents it and it has actually appeared on the scene in tangible form.

The most critical issue in transport today involves what to do about the deteriorating postwar condition of the railroads and the multiplying evidence of long-term railway decline. If the newer agencies, air, highway, pipeline, and barge transport, are truly superior to the railroads in service and in resource costs, and if, all traffic needs considered, those modes can completely and efficiently take the place of the railroads, then the problem would be a simple one of determining the proper rates of disinvestment in railway facilities and of abandonment of rail services, while investing sufficiently in other transport to carry the traffic load from which the railroads would progressively be released. Even so, there would be no economic reason for subsidizing any of the newer agencies, except in the very early stages of initial development. On the other hand, if the new agencies cannot substitute completely or sufficiently for the railroads and cannot give as comprehensive or as low-cost service as the rail carriers, then the problem is far more difficult, and wholesale revision of past policies in transport will be essential.

At this point, a résumé of the well-known facts revealing a long-term decline in the market position of the railroads is pertinent. The principal facts are as follows:

1. The railroads' postwar freight traffic has averaged about forty per cent above the 1926 and 1929 levels, representative years during the last sustained prosperity era previous to the present one.

2. Notwithstanding, the rail share of total intercity ton-miles has dropped from seventy-five per cent or more to 46.3 per cent in 1957, while the shares of the truck lines, barge lines, and pipelines have all risen greatly.

3. Rail ton-miles have not exceeded the 1947 postwar peak in subsequent years, whereas total intercity ton-miles have risen by a third and the combined intercity volume carried by competing truckers, barge operators, and pipelines has doubled since that time.

[15] See ALASKA INTERNATIONAL RAIL AND HIGHWAY COMMISSION, ADDITIONAL TRANSPORTATION FACILITIES TO ALASKA (1959); SUMMARY OF PREVIOUS STUDIES (1957).

4. After a phenomenal wartime increase in rail passenger-miles, the passenger traffic of the railroads has fallen steadily, the 1956 volume being only about four-fifths as high as the 1926-29 level and the rail share being only 4.09 per cent of total intercity passenger-miles by all agencies in that year (3.65 per cent in 1957), compared with twenty-two per cent in 1926.

5. In many transport markets, including those of medium hauls, where much traffic is concentrated, the railroads have lost so much of the high-rated, profitable types of traffic that frequently their market shares of specific items of manufactured and miscellaneous traffic between particular points have been reduced to negligible percentages, and even to zero in not a few cases.

In brief, while the trucks increased their intercity traffic by more than 150,000,000,000 ton-miles since 1947, the pipelines added more than 125,000,000,000 ton-miles to their total, and the barge lines added about 80,000,000,000 ton-miles to their volume, the railroads stood still in freight traffic; and much of the most profitable types of traffic, even transcontinental hauls, shifted away from them. Obviously, the railroads did not participate in the growth of the postwar economy, while their principal freight competitors attracted an additional volume in excess of one-half the annual freight traffic of the railroads in postwar years. Much of the passenger traffic lost by the railroads shifted to the airlines. In addition, the private automobiles took away most of the vast new intercity travel during postwar years, with the airlines commanding a small share.[16]

The revenue, profits, and capital-investment effects of those huge shifts of traffic from the railroads have been disastrous, except in the case of certain southern and western roads that enjoyed traffic gains from population and industrial growth and except for the highly unique Pocahontas coal railroads. Although accounting for the total revenues or revenue equivalents (operating expenses) of all agencies poses problems, it is clear from the available data that the aggregate revenues of all carriers, including the revenue equivalents of private carriers, have risen during postwar years as a result of two forces: inflation and traffic growth. Rail revenues, like those of other agencies, have expanded, but the postwar growth of rail revenues has not kept up with that of competing agencies. The reasons for these contrasting trends are that the accretions in rail revenues represent inflation in freight rates only, whereas the revenue gains of competing agencies represent both higher freight rates and far larger traffic volumes.

The rail share of the estimated operating revenues of all carriers subject to federal regulation dropped from 72.1 per cent in 1947 to fifty-six per cent in 1956 (total revenues expanded from $13,100,000,000 in 1947 to $20,300,000,000 in 1956, while those of the railroads rose only from $9,500,000,000 to $11,400,000,000). While the total freight revenues of motor carriers (including the revenue equivalents of private carriers and of the for-hire groups for which revenues are not reported) rose from

[16] NELSON, *op. cit. supra* note 1, chs. 2, 3.

an estimated level of $1,700,000,000 in 1940 to $13,600,000,000 in 1955, rail freight revenues increased only from $3,500,000,000 to $8,500,000,000. Hence, the rail share of combined motor-rail freight revenues dropped from 67.4 per cent to 38.7 per cent. Finally, domestic scheduled airline revenues rose from $55,900,000 in 1939 to $1,201,100,000 in 1955; in the same period, rail passenger revenues increased only from $417,700,000 to $743,700,000, or by less than a third of the airline gain.[17]

As might be expected from the traffic and revenue trends cited, the railroads have been a low-return, "sick" industry during the postwar era. In the same period, the motor carriers, barge lines, pipelines, and airlines have generally prospered in terms of rising aggregate net profits and relatively attractive rates of return on net investment. Direct and indirect subsidies to some of those carriers no doubt contributed to this result. The evidence of the railroads' financial distress, in the form of low and uneven earnings, is so well known that it need not be presented in detail here. However, for more than a decade, the rail industry's rates of return on net investment, with few exceptions, have been at the three to four per cent level, and the profit situation has been far worse for the Eastern District railroads, where some of the nation's largest and most important roads, such as the Pennsylvania and New York Central, operate. As the record of operating deficits during the 1957-58 recession revealed, such low levels of returns are insufficient for important railroads to establish sufficient reserves to tide them over adverse times without experiencing the threat of bankruptcy. Rail passenger traffic has declined so seriously that railroads carrying passenger traffic have experienced huge full-cost passenger service deficits (up to $724,000,000 a year in 1957), and even large and rising deficits (up to $121,000,000 or more a year) when passenger train revenues are measured against the solely related expenses, taxes, and rents attributable to the passenger service, according to ICC accounting standards. To a considerable but not precisely known degree, the passenger-service deficits have contributed to the over-all low profitability of the railroads. An additional fact of material significance is that the low-profit railroads represent more than one-half of the entire industry, rather than a few marginal railroads.[18]

Among general effects that touch the shipping and traveling public are the recurring freight car shortages, the lack of sufficient modern freight cars, the discontinuance of hundreds of branchline and local mainline passenger trains, the threat of eventual loss of many or all commuter trains serving the largest metropolitan centers in the country, the ever-rising freight rates and passenger fares as the railroads have attempted to counter wage and price inflation with higher rates on the same or lower traffic, retarded capital investment in several areas of railway operation, and finally, considerable disinvestment in multiple main-line capacity, especially by the eastern railroads. Excess capacity in basic plant has especially plagued those roads because of the shift of industry to southern and western regions, the rapid highway improvement in the Northeast, and the tremendous growth of truck compe-

[17] *Id.* at 23-29.

[18] *Id.* chs. 7, 9.

tition in reflection of better highways and the comparatively short distances between major eastern centers. Only recently have these effects commanded widespread public discussion. No doubt, the threat of loss of needed commutation and other rail passenger services has stimulated a general interest in the railroad problem. Such unsatisfactory conditions have again raised the question whether the ever-expanding public spending programs and continuing subsidies have discouraged railway progress and increased rail and investor determination to withdraw from unprofitable services.

But not all effects of the current rail situation are disturbing. After too many years of hesitation, the railroads have now been stimulated by competition and adversity to inaugurate a program of vigorous competitive rate-making, to offer new and coordinated services such as hauling trailers on flat cars under several different plans, and to experiment widely with new types of rates and shipper incentives designed both to reduce unit costs and attract traffic. In addition, the roads have been encouraged to find new ways of substituting capital for labor, to modernize motive power and other facilities as rapidly as financially feasible, and to seek solutions to long-standing labor and regulatory problems.

No doubt, many observers will be inclined to argue that if the railroads will attack their competitive, modernization, and efficiency problems with sufficient enterprise, the critical economic situation of the industry will correct itself without any basic change in public policies. Others will contend that the rail difficulties are wholly due to desirable technological substitution, rather than to uneconomic displacement reflecting the differential advantages of subsidies, public way and terminal tax exemption, and not having to bear the overhead costs of investment in ways and terminals. Some will argue that the differential subsidy, tax, and cost-structure advantages afforded air, highway, and water carriers are too minor, in any event, to be found responsible for railway decline and its emerging long-term effects.

These varying views merit careful analysis by all concerned with the transport problem. However, even if the railways have not done all in their power to improve their market position, the correction of such condition would in no way justify continuation of subsidies to other agencies. And although the rail spokesmen may have overemphasized the contribution of public aids and subsidies to railway decline and may have minimized management's role and other factors, a position that differential aids and subsidies have not been a factor in railway decline would be untenable. For one thing, such a position overlooks the fact that the effects of subsidies to competing modes have been cumulative over a long period and probably are becoming greater each year as a result of expanding public expenditure programs and the lag in adoption of user fees. While it is not possible to conclude exactly how much of the rail loss of market and income position has been due to subsidies and to differential advantages from use of public ways and terminals, nor to establish how much of that market loss can be attributed to fully economic technological substitution, the most logical inference seems to be that some material

loss of rail traffic, revenues, and profitability can be assigned to uneconomic subsidies and to the other special benefits of public aids.

The view sometimes advanced that the trend toward displacement of the railroads is not a serious economic problem rests fundamentally on the obvious fact that the traffic and revenue shifts from the railways have resulted from the choices made by shippers and travelers in markets for transport services after giving consideration to the relative advantages of the alternative services and rates available to them, including the services and costs of private carriers. But the exercise of shipper and traveler choice alone is not sufficient to assure an economic distribution of traffic and allocation of resources in transport. Those results can be assumed to occur through markets only when all resource and social costs involved in supplying each of the several types of transport service are covered in the rates quoted to shippers and travelers (and are included in private carrier costs), and then only when the rates appropriately reflect the cost of the different services rendered. There are other conditions essential to an ideal division of traffic and allocation of resources between transport and other products that need not be detailed here.[19]

Are all resource and social costs of producing alternative transport services included in the rates which shippers and travelers must pay, or in the alternative costs that must be borne if private transport is chosen? Beyond any doubt, the answer must be in the negative. Thus, the barge lines, whether operated for-hire or as private carriers, do not make any direct payments for their use of government-provided channels, locks, and navigation aids, even to defray such recurring expenses of operation as for labor, electric energy, and maintenance. Considering the comparatively inferior service by water, the cost per ton-mile thereby escaped is sufficient in relation to bargeline carrier costs to allow barge rates to be enough lower than they otherwise would be to attract an unknown amount of traffic from other agencies, principally from the railroads. The less-than-compensatory airport charges and the lack of fees for use of the federal airways also lower the service costs of air carriers below what they otherwise would be. However, with air travel over long distances so superior in speed to surface travel, it is less certain that adding the costs escaped by the airlines to their fares would materially reduce the volume of long-distance air travel. Undoubtedly, substantial marginal short-distance travel and some aircoach business over longer hauls might go by other agencies if all airway and airport costs reasonably attributable to the airlines were charged and were reflected in air fares; and the volume of air cargo, because costs and rates are now so high as drastically to limit traffic, might be reduced somewhat if all airway and airport costs had to be borne by the airlines.

In the case of the highway carriers, the matter is greatly complicated by the fact that both automobiles and commercial vehicles have long paid user fees and large annual amounts toward sustaining the capital and operating costs of the public

[19] *Id.* at 187-88; J. R. SARGENT, BRITISH TRANSPORT POLICY ch. I (1958); MEYER, PECK, STENASON, & ZWICK, *op. cit. supra* note 1, ch. VII.

highway system. There is no part of that system which is furnished entirely free of any charge, as in the case of the inland waterways. One view is that motor vehicles may pay more than the marginal costs of operating the highways, since state and federal user free systems have raised capital funds in large amounts in addition to covering operating and maintenance costs—and in some cases, even total amounts greater than all highway expenditures. According to that view, the marginal costs of motor carriers may have been raised by highway contributions to levels higher than are economic and thus not enough economic diversion from railways to highway carriers has occurred.[20] On the other hand, it has many times been demonstrated that the largest and heaviest vehicles do not pay fully in proportion to their use of the highway plant, for, with the exception of a few states, the significant diesel-powered trucks and buses do not pay a differential fuel tax to compensate for their higher miles per gallon as compared with gasoline-propelled trucks and buses. In addition, graduated registration fees are usually not adjusted so that the high-mileage vehicles must pay proportionately more than the low-mileage vehicles of the same type, and only a comparatively few states have adopted weight-mile taxation. However, it is a matter of controversy whether the large and heavy vehicles pay user charges sufficient to bear the full additional investment and maintenance costs that their size and frequent heavy axle loads make necessary, although a good deal of factual information suggests that they may not in many states.[21] Hence, while highway users as a class do, in large part, support the public ways they use, there can be no assurance that all subsidies to the truly significant heavy and long-distance highway carriers have been eliminated.

Even though existing user fees may be adequate to cover the annual costs actually occasioned in rendering highway services to automobiles and other light vehicles (and those of other classes of vehicles in some jurisdictions), it cannot be overlooked that there are other special advantages to the users of public way and terminal facilities that are not available to carriers owning and maintaining their own basic plant facilities. These arise from the following facts:

1. State and local property taxes are not levied on airways, airports, highways, and inland waterways, whereas they are levied on the road and track facilities of the railroads and on the pipelines.

2. Capital funds are often available for public investment in ways and terminals at lower interest cost than are funds for investment in private facilities, reflecting the income tax-exempt status of state and local bonds and the added security of the taxing power behind many government bonds.

3. Air, motor, and water carriers are spared the necessity of raising capital funds for construction of public way and terminal facilities, and of bearing the fixed costs attributable to provision of airways, airports, highways, and waterways.

[20] Miller, *supra* note 14, at 371-72.

[21] See references to federal and state highway user-fee studies in Tallamy, *First Progress Report of the Highway Cost Allocation Study*, H.R. Doc. No. 106, 85th Cong., 1st Sess. 126-31 (1957).

User fees for highways and airports do not include property tax amounts equal to the state and local taxes that would have been levied on those facilities if they had been in private ownership. Estimated property taxes on the line facilities of the railroads amount to more than $200,000,000 a year.[22] If user fees are to make shipper and traveler choice truly effective in selecting the most efficient transport alternative, they should include property tax equivalents with respect to public ways and terminals.[23]

It is true that motor-vehicle owners, including motor carriers, pay general excise taxes to the federal government on motor vehicles and parts. However, since passage of the Highway Revenue Act of 1956,[24] converting a portion of those taxes into federal highway user fees and all federal excise taxes on motor fuels, tires, and tubes into payments for federal-aid highways, the aggregate annual amounts of such general tax contributions have been lessened.[25] To ascertain whether the remaining general excise taxes equalize the cost situation as between highway carriers and the railroads would require a comprehensive factual study.[26] In the case of airways, the two-cent excise tax on aviation gasoline (after refunds) cannot be considered both a partial payment toward the annual user costs of airway services, as contended by the airlines, and also a general tax in lieu of property taxes on those public facilities. Inland waterway carriers do not pay federal excise taxes on motor fuels. However, all types of carriers pay applicable property taxes on privately-owned equipment and terminal facilities; and if net income is earned, all privately-owned carriers pay federal income taxes.[27] Notwithstanding, the costs of carriers using public way and terminal facilities do not include all the tax elements of cost with which privately-owned carriers are assessed recurrently.

Interest on capital funds invested in public transport facilities is included in the costs to be covered by user revenues only to the extent, and at the rates, actually paid. Although tolls for the services of modern toll roads and highway user fees include charges to recover interest actually paid on borrowed funds, it is doubtful that existing user fees for highways and airports have generally included interest at its full social-cost level—that is, at the marginal rate which the capital funds might have earned in alternative private investments. However, in extending public investment in way and terminal facilities, the total costs to be justified by the benefits should include interest on the capital to be employed at the full social costs of government financing, rather than at the lower interest rates at which money can often be

[22] NELSON, *op. cit. supra* note 1, at 109. In 1956, Class I railroads paid estimated property taxes on way facilities of $213,700,000, or 2% of the $10,551,000,000 of total operating revenues for that year.

[23] ROLAND N. MCKEAN, EFFICIENCY IN GOVERNMENT THROUGH SYSTEMS ANALYSIS 163-65, 205, 242 (1958); Board of Investigation and Research, *A Report on Carrier Taxation*, H.R. Doc. No. 160, 79th Cong., 1st Sess. 22 (1945).

[24] INT. REV. CODE OF 1954, § 4041 *et seq.*

[25] Tallamy, *supra* note 21, at 27-37.

[26] Such as the report, directed by Dr. Ronald B. Welch, comparing carrier tax payments in 1940. Board of Investigation and Research, *A Report on Carrier Taxation*, H.R. Doc. No. 160, 79th Cong., 1st Sess. (1945).

[27] For a summary statement of exemptions and the differential extent of such taxation as of 1940, see *id.* at 21-50.

borrowed by government agencies or at a zero interest rate if the funds are obtained from taxation. Only when the benefits of a public project are sufficient to cover all costs, including interest at as high a rate as the capital could earn in other employments, can it be assumed that there is greater economy in expanding transport dependent on public facilities than in permitting the traffic to be carried by the privately-owned carriers operating on private ways, enlarging their capacity for that purpose if necessary.[28] And in the cases in which public way and terminal investment prove to be well-adjusted to the demand for them, economic neutrality would require that the user fees charged for their use should include interest at a rate equal to the full social cost of government financing.

Neither in public investment decisions nor in the pricing of public transport facilities has much consideration been given to the social costs attributable to air and highway transport. On the highways, the additional risks of fatal accidents and the extra time and money costs of congestion and inability to pass on hills are frequent social costs forced on automobile owners by the large trucks and buses. The expanding use of automobiles, for which the streets and parking facilities are grossly inadequate, has been an important factor in making public transit and commutation facilities unprofitable and investment in modernized rapid transit facilities unattractive to private investors. Automobile travel has thus contributed to high-cost and inadequate transit and commutation service for the millions of urban people not owning passenger cars in metropolitan communities where passenger cars cannot physically meet the peak home-to-work travel demands.[29] But in only a few cases are any of those social costs imposed on the highway users specifically responsible for them. Nor is the social cost of the noise of airplanes fully placed on the airlines and their customers. Of course, the railroads and the transit lines also have created some serious social costs (noise, smoke, and slum dwellings) that the firms and their customers largely escaped in the past, although dieselization of railway motive power has almost eliminated the smoke and soot nuisance of coal-powered steam locomotives. No doubt, the real marginal costs of highway use rise automatically for all motorists and commercial carriers as congestion becomes intense; but this does not necessarily assess the social costs of congestion against the proper classes of motor vehicles, and it does nothing to relieve non-motor-vehicle owners of motor vehicle noise and exhaust fumes nor to compensate them for the deleterious effects of those conditions on health, happiness, and property values.

The points can be made that such social costs are intangible and hard to measure in specific terms, and that in any case, it has not been customary to require private firms and individuals to bear the social costs of their activities along with the money costs priced out to them in the markets for economic goods and the factors of

[28] The opportunity cost of capital for public projects raised by federal taxation was found to be on the order of 5-6%, accepting private time preference, in OTTO ECKSTEIN, WATER-RESOURCE DEVELOPMENT 81-104 (1958); and JOHN V. KRUTILLA & OTTO ECKSTEIN, MULTIPLE PURPOSE RIVER DEVELOPMENT 78-127 (1958).

[29] WILFRED OWEN, THE METROPOLITAN TRANSPORTATION PROBLEM 137-41, 253-54 (1956).

production. While those points are largely true, this does not mean that social costs should be ignored where such costs are substantial and traceable. It may be noted that both public and private power companies are required to construct and pay the full social costs of installing fishways when power dams are placed across rivers. At all events, where there are uncompensated social costs that may be contributing to the decline of much-needed and economical systems of transport for which complete alternatives do not exist, the problem should be looked into more seriously than in the past. The social disadvantages of rapid expansion of public transport facilities and the attendant encouragement of further diversion of traffic to carriers using public ways from agencies they cannot fully replace should be carefully considered along with the benefits to be derived from that source. At the minimum, uncompensated social costs provide another reason for limiting capital investment in public transport facilities to those amounts and cases for which the economic justification is clear-cut, and for adopting appropriate user fees and tolls for use of all public transport facilities.

As heretofore noted, the carriers using public way and terminal facilities escape the fixed-cost burden of owning their own ways and terminals as well as the necessity of having to raise the capital from private markets for expanding and modernizing those facilities. As a consequence, those carriers can adjust their investment much more closely to changes in traffic demand than can the privately-owned railroads. In addition, carriers using public facilities, especially the motor carriers, are much more flexible in their entry into the best markets for traffic and in their ability to curtail or abandon service as it becomes relatively or absolutely unprofitable. Such advantages, due in large part to organizational arrangements in air, motor, and water transport, could be extended the railroads by government ownership of the rail track facilities, with the privately-owned rail carriers paying user fees for their use. Another solution might be to allow the railroads also to operate airplanes, motor vehicles, and barges over public facilities to the extent such operations may be more profitable than operating trains; but this alternative might mean that some of the advantages of rail operations would be neglected, and, unless controlled according to antitrust law standards, this might again tend to create obnoxious monopoly power in transport.

When consideration is given to the complete lack of user fees in some areas, the questions that can be raised concerning the adequacy of user fees now charged highway and air carriers, the tax exemptions, interest-cost, and investment advantages accruing to carriers dependent on public way and terminal facilities, and the extent to which carrier rates diverge from costs of service, it cannot be concluded that the division-of-traffic trends in transport have been fully economic in the past, even though they have reflected the deliberate choices of shippers and travelers. Thus, it is quite likely that public expenditures and subsidies have influenced more traffic to move by the agencies using public facilities and receiving subsidies than otherwise would have moved over them. Accordingly, the logical possibilities all point to the

conclusion that subsidies and the differential advantages of public facilities have been factors in long-term railway deterioration and decline.

IV

THE EFFECT OF PUBLIC AIDS ON CAPITAL FORMATION IN TRANSPORT

Transport has long been a field in which technological change and capital investment have contributed greatly to cost reductions and product improvements. Both private and public investment have been important in bringing about rapid transport modernization, once new or improved motive power, carrying equipment, terminal devices, and way facilities had been invented and adapted for actual operations. All factors point to the expectation that capital investment will continue to be tremendously important in transport progress.

But under the conditions that obtain in transport today, can it confidently be expected that the full dynamic technological and modernization possibilities will be achieved in all fields of transport important to the economy? This question has not been accorded the attention it merits in the formulation of public policy, for it has generally been assumed by the policy-makers that the privately-owned agencies, dependent almost wholly on their earnings and the private capital markets for capital funds, can somehow attract the funds needed to develop fully all cost-reducing and service-improving innovations that come along and to supply adequate facilities for the needs of commerce. However, this easy assumption, made by the policy-makers as recently as during enactment of the Federal-Aid Highway Act of 1956,[30] seems not only unwarranted on the basis of current trends in transport, but also likely to lead to tragic consequences if not corrected before long.[31]

Inadequate capital investment is found mainly in the privately-owned sector of transport, particularly in the railway and transit industries.[32] This is because the appropriation of capital funds for airways, airports, highways, and inland waterways is decided by political processes in both the federal and state areas; because capital funds for those facilities are not entirely limited by the earnings possibilities from their use on the basis of user charges; and because government can, and has, used the taxing power, as well as its superior credit, to raise capital funds for investment in public transport facilities. Not to be overlooked is the influence of widely-held political theories concerning the responsibility of the government for increasing public expenditures, even with deficit financing, to bring about full employment and to counter income-reducing forces in time of recession or depression. To the extent that government investments are expanded for those purposes, public transport programs become eligible for expansion and can be enlarged far beyond the limits imposed by traffic needs and over-all transport economy. A recent example is the ex-

[30] 70 Stat. 374.

[31] See Harbeson, *supra* note 13, at 3-19.

[32] Adequate capital funds have been available for development and modernization of the privately-owned oil and gas pipelines according to the needs of the market, since those facilities have been integrated with the profitable oil-refining industry, pipeline unit costs have been relatively low, and the volume of oil and gas traffic has grown rapidly.

panded rate of federal highway investment authorized by the Federal-Aid Highway Act of 1958[33] without raising user fees to pay the additional costs. As already pointed out, the airlines can also count on receiving significant indirect technological benefits from public investments in applied and pure science in behalf of national security. On the other hand, except for the temporary extensions of government credit when the railroads have been in serious financial straits as during the depression (RFC loans) and the 1957-58 recession (government guarantees of loans, as authorized by the Transportation Act of 1958), and the rapid amortization for tax purposes available to all defense-important industries during recent wars and periods of national emergency,[34] the privately-owned railroads and pipelines have no comparable political forces bringing about the appropriation of vast capital funds for expansion, replacement, and modernization of their ways and terminals.

Both the vast magnitudes of current public investment in transport facilities in contrast to that in the railroad industry and the rapid expansion of the former as compared with the latter suggest that a real danger exists that insufficient capital may be going into the railways, which still carry almost half of the country's intercity ton-miles and about a third of the intercity travel by common carriers. According to the Bureau of Public Roads, the estimated annual level of capital expenditures by all government units on the federal-aid and other highway systems increased from $4,997,000,000 in 1956 to $7,138,000,000 in 1959, or by more than $2,000,000,000. Estimated capital expenditures on the Interstate System, the system most competitive with the railways, rose from $1,282,000,000 in 1956 to $2,844,000,000 in 1959, or by more than $1,500,000,000.[35] The tremendous increase in annual investment in the key highways was greater than the average annual gross investment, including that in motive power and car equipment, of $1,100,000,000 in the railways during 1946-55.[36] It contrasts greatly with the sharp downturn in railway gross investment in 1958 and 1959, reflecting the reduced traffic, revenues, and profits occasioned by the recent recession.[37]

Without raising the logical question whether the huge and rising magnitudes of highway investment portend overinvestment in highways, it takes no prophet to foresee the ultimate outcome of rapid expansion and modernization of highway facilities, while railway investment, particularly in roadway facilities (only $329,400,000 per year during 1946-55) lags far behind. This can only mean that railways cannot make the maximum progress of which their technology is capable. It also suggests that the freight car supply will continue to be inadequate and that modernization of freight cars will not occur as quickly as would be desirable. It will take the greatest managerial ingenuity in competitive pricing, in service improvement, and in other

[33] 72 Stat. 885, 23 U.S.C.A. §§ 101-31 (Supp. 1958).

[34] NELSON, *op. cit. supra* note 1, at 201. Effective Oct. 1, 1959, through June 1961, the federal motor fuels tax was raised from 3¢ to 4¢ per gallon for highway purposes.

[35] U. S. Bureau of Public Roads, Dep't of Commerce, Release, Estimate of Receipts and Disbursements for Highways, 1956-59, Jan. 16, 1959.

[36] NELSON, *op. cit. supra* note 1, at 384. See Railway Age, May 18, 1959, pp. 16-17.

[37] Transport Economics, Dec. 1958, pp. 1-2; *id.*, March 1959, pp. 1-2.

areas to compensate for inadequate capital formation by the railroads when investment in public transport facilities constantly expands.

In his recent study of railway capital needs, John W. Barriger has estimated that railroad investment should be doubled—to an average annual level of $2,000,000,000 at 1954 prices.[38] Furthermore, Barriger contends that the greater part of that expanded annual total should go into roadway improvements that would enhance the speed of rail service and bring about substantial unit cost reductions. The view that the railroads have been unable to invest sufficient capital funds in the postwar period to achieve the modernization that experience has proved feasible is widely held among rail managements and transport specialists, including many shipper representatives who desire an adequate supply of modern freight cars, improved service, and the relief from ever-rising freight rates in an inflationary economy that can be achieved only by the maximum cost reductions of which rail technology is capable. It is common knowledge among students of the railroads that capital for railway investment has been so short that many railroads can finance only the top high-return investments on their investment priority schedules. While highway investment also lagged during World War II and the rapid postwar expansion of motor-vehicle ownership and travel has created many highway bottlenecks, it is doubtful that the policy-makers, in deciding to raise the annual level of highway investment, made any specific comparisons to ascertain whether another billion dollars invested in transport could earn a higher rate of return (and thus yield greater economic benefits for society) in interstate highways on the one hand, or in interstate railways on the other. Manifestly, although highway traffic has been rising while rail traffic has been stable (freight) or falling (passenger), the institutional conditions of investment have been highly favorable to large-scale highway investments for improving motor transport service and lowering its costs, and have been equally unfavorable to higher levels of rail investment for exploring the cost and service gains that might also be achieved in that field. There is a very real possibility that the expanded public expenditures on highways may lead to overinvestment in that field and to underinvestment in the railroads. Even if the former possibility does not eventuate, however, the latter will deny society the full measure of transport progress unless policy changes more favorable to balanced investment in transport are adopted.

Government investment in the inland waterways and in airways and airports has also expanded materially in recent years. For example, the Corps of Engineers reported rivers and harbor expenditures for navigation in fiscal 1953 of $183,400,000 for capital construction and $88,800,000 for maintenance, or a total of $272,200,000 for all purposes. These levels compare with $28,300,000, $60,900,000, and $89,200,000, respectively, in fiscal 1947. And an additional $6,900,000,000 of federal funds will be required to complete the federal program authorized for navigation (including multiple-purpose projects) through fiscal 1957. Federal appropriations for the rivers-and-harbors program amounted to $4,200,000,000 through fiscal 1954, after adjusting

[38] JOHN W. BARRIGER, SUPER-RAILROADS FOR A DYNAMIC AMERICAN ECONOMY 71 (1956).

for those portions of the cost of multiple-purpose projects that are assignable to non-navigational purposes. Total federal airway expenditures have risen from $70,900,000 in fiscal 1950 to $152,400,000 in fiscal 1957, of which those for cost of establishment rose from $17,500,000 to $56,900,000. Under a recent revision of the Federal Airway Plan, federal airway expenditures are scheduled to more than double between fiscal 1957 and fiscal 1962. Federal aid to airport construction, which ranged between $5,100,000 and $33,200,000 during fiscal years 1948-57, was authorized to rise to $63,000,000 a year in subsequent years under the 1955 amendment of the Federal Airport Act.[39] That level is more than double the average annual appropriations under the 1946 Act.[40]

Hence, under the political and economic pressures that insistently manifest themselves in the Congress, the investment programs for highways, inland waterways, and air facilities have been greatly increased in recent years. Unless such investment is tied more closely than in the past to the economic limits that would be imposed under complete user-fee financing and under economic criteria that would necessitate systematic consideration of the relative investment opportunities in all fields of transport, there will be no reversal of this trend in the future. In all likelihood, it will continue to be difficult, if not impossible, for the privately-owned railroads to expand their annual investment as much as technological opportunities warrant. Whatever these prospects mean in terms of improved air, motor, and water service and reduced carrier costs in those fields, they plainly endanger achieving, in addition, the maximum gains that appear possible from greater investment in the railroads. Indeed, they may well yield smaller benefits per dollar invested in transport facilities than might be obtained under a more balanced investment program for transport as a whole.

The recurrent car shortages, the highly disturbing commutation service discontinuances, and the vulnerability of important railroads to bankruptcy in time of modest recession all suggest that one effect of public expenditures on highways, air facilities, and waterways has been to discourage investment in the railroads. With low profitability prevailing for many years, the railroads cannot attract capital from the outside, except for equipment, and cannot greatly increase their investment from retained earnings. Since public investment and continuing subsidies in some transport fields have been factors in diversion of traffic and revenues from the railways, it must be concluded, too, that they have also contributed to limiting the investment levels in that industry. Low profitability in the rail industry, influenced in part by subsidies, discourages private investment; but political demands bring about more investment in the basic facilities for competing agencies, whether or not such investment is shown to be self-liquidating or must meet market tests of its worth.

[39] 69 Stat. 441, 49 U.S.C. §§ 1101-11 (Supp. V, 1958).

[40] 60 Stat. 170, 49 U.S.C. §§ 1101-19 (1952). See NELSON, *op. cit. supra* note 1, at 85-88, 97-98, 100-03.

V

A PUBLIC AIDS POLICY FOR THE FUTURE

The historic public policy of fostering transport innovations and development has been an important factor in stimulating the high productivity of the American economy by increasing the division of labor, the geographical specialization in industry, the volume of trade, and the economies in large-scale production. Along with private enterprise in the private sectors of transport, it has also contributed the most highly-developed, diverse, and efficient transport system in the world. By encouraging rapid use of new techniques of transport, it has greatly enriched social life and increased communication among people in a variety of ways.

It cannot be denied that initial subsidies to hasten the introduction of infant transport industries have contributed to early achievement of the important gains from improved transport. However, the original purposes for the historic subsidy programs have largely, if not completely, been accomplished, and in recent decades, the transport problem has substantially changed character. From stimulating an initial supply of efficient transport to develop the vast land resources of this country and from encouraging a more rapid introduction of a succession of new agencies than the market alone would have brought about, the national transport problem has changed to one of facilitating the right economic development of each mode of transport, including essential public way and terminal facilities. A solution to that problem must be found both to prevent an already tolerably adequate system from breaking down in essential areas and to minimize transport costs by eliminating wasteful investment and the costly practice of encouraging traffic to move over high-cost rather than low-cost agencies.

As government, for good reasons, owns, manages, and finances airways, airports, highways, and inland waterways, there obviously remains a public need for continuing government investment in those facilities more or less indefinitely. While there is thus a permanent case for efficient public investment programs in transport and possibly one for public investment in rail roadway facilities to equalize the conditions of investment other than by adoption of universal user fees, no economic case can be made for a continuing program of subsidies in addition to the efficient public investment that the mixed system of transport makes necessary. As originally conceived, most subsidy programs for domestic transport had concrete national development objectives. These have largely or wholly been achieved. Present-day subsidies to domestic transport are designed for the special advantage of particular regions, industries, transport firms, and users, rather than for greater transport efficiency as a whole and for elevating the productivity of the entire economy to the maximum extent.

By relieving the carriers enjoying subsidies along with public facilities of some of the resource costs of producing their transport services, transport subsidies lower the cost of operation of such carriers. They thereby enable these carriers to quote lower rates than otherwise would be the case Since their rates do not include all

economic costs, it is often impossible for shippers and travelers to select the agency and carriers economically best fitted to render the service demanded. The inevitable result is that traffic tends to be diverted from agencies and carriers having lower resource costs than the subsidized carriers. In turn, this means that traffic tends to be induced to flow over high-cost rather than low-cost agencies. Although other factors have also influenced much diversion from the railroads in recent years, there can be no doubt that a part of that traffic diversion has been uneconomic.[41]

Moreover, since traffic and revenue diversion from the railroads has been increased by subsidies to competing modes, it follows that continuing subsidies have been a factor in the railroads' deteriorating postwar condition. The tax and cost-of-capital advantages to carriers using public ways and terminals have further contributed to low rail earnings and to underinvestment in rail plant. Finally, the far greater availability of capital funds for airway, airport, highway, and waterway expansion and modernization, the result of powerful political pressures for public investment, as well as the induced expanding traffic volumes carried by those facilities, has tipped the scales further in favor of rapid technological advances in air, motor, and water transport. Meanwhile, modernization lags in the rail industry, and equipment and motive power are often inadequate to handle present traffic. Clearly, if nothing is done to eliminate unnecessary subsidies and to encourage a greater flow of capital into that industry as well as into competing agencies, the country will be taking grave risks of losing essential and self-sustaining rail services and plant that even now are needed to transport the traffic load efficiently and may again be more urgently required when traffic is at wartime peaks. It, therefore, seems foolhardy for the nation to ignore this situation when the evidence logically points to subsidies and unbalanced transport investment as factors in the disturbing condition of the railroads. The means are at hand for correction of those deleterious influences in behalf of the public welfare as a whole.

The first step that should be taken is to enact a policy of user fees for all agencies using public way and terminal facilities. As the chief gaps in user fees are the lack of explicit charges for use of the civil airways and the inland waterways, only federal action is required. The Civil Aeronautics Administration has made several studies of user charges for the airways and has found them feasible.[42] Programs of airway user fees have been recommended to the Congress by President Eisenhower, and in 1957, the Department of Commerce was directed to study the feasibility of tolls for use of waterway channels and locks.[43] As the Department of Commerce report should be issued in the near future, there should be no significant technical difficulties

[41] *Id.* ch. 10.

[42] CAA, U.S. DEP'T OF COMMERCE, A PROGRAM OF CHARGES FOR THE USE OF THE FEDERAL AIRWAYS SYSTEM 121-31 (1953); *id.* at 6-7 (Supp. No. 1, 1954). *Cf.* MEYER, PECK, STENASON, & ZWICK, *op. cit. supra* note 1, at 139-44.

[43] See the *Budget Message of the President*, in THE BUDGET OF THE UNITED STATES, FISCAL YEAR 1959, at M30-31 (1958); *id.*, FISCAL YEAR 1960, at M47-50 (1959); the BUREAU OF THE BUDGET, BULL. No. 58-3, USER CHARGES FOR CERTAIN GOVERNMENT SERVICES (1957); Dep't of Commerce Release No. G-850, Nov. 27, 1957. *Cf.* MEYER, PECK, STENASON, & ZWICK, *op. cit. supra* note 1, at 122-26, 148.

in the way of prompt legislation to enact user fees for the airways and waterways. On the other hand, such proposals will encounter stout political opposition from the transport industries involved and from communities that differentially benefit from subsidies. Eventually, however, national concern over the prospect of inadequate rail transport, the need for greater economy in transport as a whole, and the pressure of other claimants for general federal funds will offset the opposition of the pressure groups benefiting from subsidized transport.

After the gaps in the user-fee picture have been closed, the next logical step will be to adjust existing user-fee systems more in accordance with economic pricing of public way and terminal facilities as rapidly as that may be possible. Such an effort will involve the states as well as the federal government; and because of the unsettled state of knowledge concerning the behavior of highway costs, some real difficulties will be encountered.[44]

The adoption of federal highway user fees for the first time in 1956 represented significant progress. However, refinement of the predominant state pattern of highway user fees (uniform fuel taxes and graduated registration fees without mileage components) adopted at that time to pay for federal-aid highways was left until January 3, 1961. By that date, the Bureau of Public Roads must complete a comprehensive series of studies designed to ascertain how highway costs are affected by the size and weight of motor vehicles as well as by their mileages of use. The Bureau will also report to the Congress on other factors that might be taken into consideration in adjusting the federal highway user fees in terms of economy and equity.[45] If the Congress eventually improves the present federal user-fee structure by adopting a diesel differential in the fuels tax and in other ways that the evidence may support, it can be expected that the states would rapidly accept the federal leadership and adjust their highway user fees accordingly. Though a distinct opportunity was missed in 1956 to make some much-needed improvements in the highway user-fee structure, it is far from too late to remedy the situation. A few states have long ago attacked some of the outstanding structural defects of highway user-fee schedules by adopting diesel fuel tax differentials and weight-mile schedules, and in many states, voluminous research has been done on highway pricing. Although the earlier Maryland and Idaho test roads were disappointing because they were not designed to throw specific light on the additional highway service costs caused by the large and heavy vehicles, the current ASSHO road test in Illinois should shed much light on that critical question. In the case of user fees for airways and waterways, effort should be made to adopt economic schedules in the beginning, allowing them to take effect gradually over a period of years if desirable to lighten the burden of adjust-

[44] See ROBERT F. BAKER, ROBERT CHIERUZZI, & RICHARD W. BLETZACKER, HIGHWAY COSTS AND THEIR RELATIONSHIP TO VEHICLE SIZE (The Ohio State University, Engineering Experiment Station Bull. No. 168, 1958).

[45] Tallamy, *supra* note 21, at 1-6. See also Kafoglis, *Price Theory and Tax Equity in Highway Finance*, paper delivered before the Annual Meeting of the Highway Research Board, Jan. 1959, pp. 2-12.

ment by the carriers to having to pay fully for government-provided way and terminal services.

Finally, a number of other policies require modification, and the railroads must do far more in their own behalf by engaging in effective competitive pricing on the basis of their own unit costs by making rapid service innovations, by dealing vigorously with their labor problems, and by directing their investments into channels that will bring the greatest returns.[46] Although the subject is beyond the scope of this article, there is also an urgent need to modify the current transport regulatory policies to permit all agencies to make their inherent advantages of cost and service effective in the market place and to lessen the drags and costs of excessive regulation of an essentially competitive transport system. Without this, the railroads cannot effectively solve their outstanding problems; nor can the present uneconomic market stimuli to overexpansion of certain fields of transport be avoided.

There is an urgent need, too, for more coordination in government planning with respect to the investment schedules for public transport facilities. First, a Department of Transportation is essential in order to provide facilities for supervision and checking of all investment needs estimates and for comprehensive and continuous research into the economic effects of federal transport policy.[47] Second, uniform economic criteria should be developed for justifying specific projects in any field of public transport, including consideration of the social costs of federal financing, tax effects, and the investment opportunities in privately-owned areas of transport as well as the several fields of publicly-owned transport. Much useful work has been done in recent years, both within the federal government and by academic economists, on the investment criteria problem, including some critical evaluations of the errors and exaggerations involved in the economic justifications prepared by various federal agencies.[48]

In conclusion, entirely too much of the nation's capital is involved in public transport investments and too much is at stake in terms of the future of the privately-owned railroads to make it sensible to continue the past separate consideration of the investment needs in each area of public transport. The techniques and much of the knowledge required for developing economic and coordinated public transport investment programs are at hand. In addition, it should be recognized that no public need now exists for continuing subsidies to domestic transport via failure to consider all resource costs in expanding public transport facilities or failure to charge user fees for all agencies using such facilities.

[46] NELSON, *op. cit. supra* note 1, at 419-27 and chs. 8-11.

[47] See Mackie, *The Necessity for a Federal Department of Transportation*, 8 J. PUB. L. 1 (1959).

[48] See, *e.g.*, OTTO ECKSTEIN, WATER RESOURCE DEVELOPMENT ch. VI (1958); EDWARD F. RENSHAW, TOWARD RESPONSIBLE GOVERNMENT ch. V (1957); CECIL B. HAVER & EDWARD F. RENSHAW, THE FUTURE OF THE ILLINOIS WATERWAY 1-3 (1957).

THE REGULATION OF TRANSPORT PRICE COMPETITION

MERRILL J. ROBERTS*

I

THE PROBLEM OF PRICE COMPETITION IN TRANSPORTATION

The social cost of transportation and the respective market roles of the several agencies are vitally influenced by rate regulation. Historically devoted to protecting the shipping public from railroad monopoly exploitation, the emphasis was altered by the advent of the newer agencies, and control is now significantly directed toward limiting price competition. Thus restricted, competition cannot perform effectively its basic functions of forcing innovation and efficiently channeling resources into alternative uses and to the most capable producers. With price competition stifled, the residual service competition exerts little pressure for cost-reducing innovation, but tends to be price-increasing and to deprive buyers of a range of price and quality choices.

On the other hand, price competition does not always function with the benevolence of the economist's model. With a large number of producers (as in agriculture), each can sell his entire output at the going market price, and there is no incentive to cut prices below this point. However, where producers are few, as in transportation markets, each can increase his sales and market share at the expense of his rivals by lowering prices. This policy is particularly attractive if one or all of the producers is burdened with high fixed costs that are unchanged by rather substantial changes in output. In such circumstances, competition may be "ruinous," driving prices of all producers to levels that permit none to achieve satisfactory financial results, despite the market's requirements for the output and buyers' perfect willingness to support the producers with higher prices. Here, the business ultimately goes to the rival with the largest resources, without regard for economic efficiency. In the case of industries like transportation which supply essential public services, such price behavior may require regulation to avoid these disastrous results.

The issues involved in interagency competition are complex. Market relations are complicated by the varying capabilities among the agencies in performing particular transportation jobs and by the industry differences in cost functions reflecting investment patterns. With privately-provided rights-of-way, the railroads require heavy investment per unit of output and have a high degree of fixed and sunk costs

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which are unrelated to volume of business. The motor and water carriers, employing publicly-provided ways for which charges are not assessed (water ways) or which are closely related to use (highways), have relatively low investment requirements and costs closely related to output. In addition, railroads require relatively large terminal investment and operating outlays which bear more heavily on the shorter hauls and produce interagency differences in cost variation with distance.

Interagency competition is further conditioned and complicated by prevailing pricing forms and institutions. Because of the heavy fixed investment, the railroads early developed a socially-sanctioned system of differential pricing, with contributions to overhead from various services determined by ability to pay. Although not socially justified by investment characteristics, the motor carriers followed this pricing pattern by matching the higher railroad rates, depending on superior service to attract business. Price competition is further affected by the practice of joint pricing through legally-sanctioned rate bureaus.[1]

The present system of control of interagency price competition is both roundly condemned and staunchly defended. Because of the overriding importance of transport services to the economy and the magnitude of the expenditures involved, there is a strong public interest in striking the appropriate balance between government control and market forces. Establishing rates at uneconomic levels by either regulation or the market may alternatively undermine the financial strength of the industries or inflate transport costs to the detriment of the public. In the complex setting of agency differentiation, discrimination, and price leadership, the issue of the appropriate roles of price competition and market forces, managerial initiative, and regulation has been drawn. This paper will describe and evaluate the present pattern of regulation as provided in the statutes and construed by the Interstate Commerce Commission, and then project the economic implications of free price competition in transport, with a view to reaching meaningful conclusions regarding the appropriate role of regulation.

II

REGULATION OF PRICE COMPETITION

A. The Control Pattern

1. *The statutory background*

Basic to the control of competition in transportation are the general powers to regulate rates set forth in the Interstate Commerce Act.[2] The ICC was endowed in 1920 with authority to set floors under rates to complement the existing power to establish upper limits. A rate could thereafter be unreasonable in violation of

[1] These cost and service-quality differences significantly distinguish competition among or between the agencies from competition among firms within an industry, and the rules that are appropriate for one do not fit the other.

[2] The Act embraces four parts, covering the various agencies: pt. I, §§ 1-27, 24 Stat. 379 (1887), 49 U.S.C. §§ 1-27 (1952) (railroad and pipeline carriers); pt. II, §§ 201-28, 49 Stat. 543 (1935), 49 U.S.C. §§ 301-27 (1952) (motor carriers); pt. III, §§ 301-23, 54 Stat. 929, (1940), 49 U.S.C. §§ 901-23 (1952) (water carriers); pt. IV, §§ 401-21, 56 Stat. 284 (1942), 49 U.S.C. §§ 1001-22 (1952) (freight forwarders).

section one of the Act if too low as well as if too high. But characteristic of such statutory provisions, establishment of criteria for determining reasonable minimum rates was left to the discretion of the administrative commission. Since no rules were provided for its application, its basic content has been drawn from other relevant statutory features.

Among the most important of such provisions is the rule of rate-making which stipulates that in prescribing rates, the Commission must consider the effect of proposed rates on the movement of traffic by the pricing carrier, the public interest in maintaining an adequate and efficient transportation service by the various modes, and the revenue requirements to insure such services.[3] This rule focuses attention on the over-all revenues of transportation industries and provides for regulatory veto of managerial pricing decisions where the Commission's estimates of price elasticity of demand differ from those of the companies.

Crucial also to competitive price adjudication is the national transportation policy statement which prefaces the Act and establishes goals which condition the interpretation of all the substantive sections. The features of this statement most relevant for present purposes are the explicit congressional objectives to provide fair and impartial regulation of all modes, so as to recognize and preserve the inherent advantages of each; to foster sound economic conditions in transportation; and to maintain reasonable charges without unfair or destructive competitive practices.[4] It is apparent that the Commission's interpretation of the key phrases "inherent advantages" and "unfair or destructive competitive practices" largely determines its exercise of power with respect to interagency price competition.

Two other statutory provisions are particularly relevant for rail-water competition. Section four, embracing the long-and-short-haul clause, requires prior Commission approval for railroads to discriminate by charging lower rates for longer hauls than for included shorter hauls.[5] A primary occasion for such discrimination is water competition at the more distant, but not at the intermediate, point. The statute requires, as a condition for approval, that the lower more distant rate be "reasonably compensatory." Under the Commission's administration, a reasonably compensatory rate must "be no lower than necessary to meet the competition" of the water carrier whose presence is the justification for the discrimination.[6] The other provision, section 305(c), stipulates that a water rate lower than a competitive rail charge shall not be construed as an "unfair or destructive" competitive practice.[7]

[3] The original rule of rate-making found in § 15a of the Interstate Commerce Act, 54 Stat. 912 (1940), 49 U.S.C. § 15a (1952), applies to railroads. Comparative provisions for the other agencies are found in §§ 216(i), 54 Stat. 924 (1940), 49 U.S.C. § 316(i) (1952) (motor carriers), 307(f), 54 Stat. 937 (1940), 49 U.S.C. § 907(f) (1952) (water carriers), and 406(d), 54 Stat. 288 (1940), 49 U.S.C. § 1006(d) (1952) (freight forwarders).

[4] 54 Stat. 899 (1940). A complete discussion of the background and role of the policy statement is developed in S. C. OPPENHEIM, THE NATIONAL TRANSPORTATION POLICY AND INTER-CARRIER COMPETITIVE RATES (1945).

[5] 54 Stat. 904 (1940), 49 U.S.C. § 4 (1952).

[6] Transcontinental Cases of 1922, 74 I.C.C. 48, 71 (1922).

[7] 54 Stat. 934 (1940), 49 U.S.C. § 905(c) (1952).

2. Commission administration of competitive controls

Since the pattern of competitive price regulation has been described in great detail by competent observers,[8] a brief summary of the basic foundations underlying Commission policy will suffice. Although there is some wavering in the strength of controlling objectives, the Commission's approach to interagency competition is sufficiently consistent to sustain rather reliable generalizations. The basic approach is, in the main, a highly protective one, with manifest concern for the fortunes of the pricing carrier, his rivals, the system as a whole, and certain shipper groups.

Even under regulation, the right to set prices, including reductions when circumstances warrant, is a management prerogative. But reduced rates must not fall below a reasonable minimum as construed under section one of the Interstate Commerce Act. Reduced rates pass the test of reasonableness if they "are compensatory, do not cast an undue burden upon other traffic, and are not competitively unfair or destructive."[9]

Determining whether a rail rate is compensatory is complicated by uncertainties regarding the appropriate contribution from each service to the large overhead. The Commission shows some ambivalence in these determinations, occasionally recognizing appropriately that rates above out-of-pocket costs but reflecting less than a pro rata share of overhead "may, because of the traffic they attract, make a greater contribution toward the indirect or constant costs than higher rates that would meet the full distributed costs."[10] But the inherent suspicion of rates that fail to reflect a pro rata contribution is seen in the commonly-expressed view that[11]

> . . . overhead costs are no less real than direct transportation costs and if all of the cars in the train, or any considerable number of them, are moving at submaximum rates, as must often be the case today, then clearly there is no room for application of the added traffic theory.

The permissible relationship between a rate and full costs is frequently tied to the value of the commodity, and rates well above this cost measure may be considered below a reasonable minimum.

[8] Particularly valuable is ERNEST W. WILLIAMS, JR., THE REGULATION OF RAIL-MOTOR RATE COMPETITION (1958). Others of note are OPPENHEIM, *op. cit. supra* note 4; U.S. BUREAU OF TRANSPORT ECONOMICS AND STATISTICS, ICC, INTER-AGENCY RATE ADJUSTMENTS, RAIL AND MOTOR (1956), and RAIL-WATER RATE ADJUSTMENTS (1954); Langdon, *The Regulation of Competitive Business Forces: The Obstacle Race in Transportation*, 41 CORNELL L.Q. 57 (1955).

[9] Hardware from New Britain to Chicago, 293 I.C.C. 515, 517 (1954).

[10] Petroleum Haulers of New England, Inc. v. Boston and Maine Railroad, 269 I.C.C. 6, 20 (1947).

[11] All Commodities, Less Than Carloads, Between Maine, Massachusetts, and New Hampshire, 255 I.C.C. 85, 88 (1942). The reference to "sub-maximum rates" is not at all clear. Perhaps it refers to rates below the maximum of reasonableness under § 1 standards. If so, it loses sight of the fact that the market may impose lower ceilings, which the "added-traffic rates" may reflect. The identification of high- and low-cost carriers by reference to full costs is amply demonstrated by Commissioner Freas in a recent statement before the Senate Committee on Interstate and Foreign Commerce. See *Hearings Before the Senate Committee on Interstate and Foreign Commerce on S. 3778—Rate-Making Rule—ICC Act—to Amend the ICC Act so as to Strengthen and Improve the National Transportation System*, 85th Cong., 2d Sess. 172 (1958). Professor Pegrum is also impressed by the Commission's strong attachment to full costs. See Pegrum, *Do We Have a New Rule of Rate Making?*, Traffic World, Feb. 7, 1959, p. 52.

Because of their relatively small overheads and the rather close correspondence between incremental and total costs, the Commission suffers less conceptual difficulty in determining appropriate cost references for water and motor carriers. According to an illustrative observation involving a motor-carrier rate proposal,[12]

> It is well settled that an essential element to be considered in determining the reasonableness of a reduced rate is whether it would be reasonably compensatory; that is, return fully-allocated costs, plus a reasonable profit.

But the determination of the appropriate cost reference for testing the reasonableness of rail rates is not particularly crucial in any case. That the remuneration test is a necessary but not sufficient condition for approval is classically illustrated by this observation:[13]

> A showing that a rate is compensatory is not in itself justification for its establishment for the purpose of meeting competition; although compensatory the establishment thereof could constitute an unfair or destructive competitive practice. . . .

Railroad rate reductions, accordingly, are not usually denied because found to be unremunerative, but because "competitively unfair or destructive." In this view, unfair or destructive rates are those "lower than necessary to meet the competition," a familiar phrase in the Commission lexicon,[14] which means that they capture an inordinate share of the market. The bounds of decency are overstepped when a rival is denied a "fair share" of the market. As an illustrative application of the fair-share test, "the primary issue presented for our consideration is whether the rate proposed is lower than necessary for respondents to regain or to retain a fair share of this . . . traffic."[15]

The determination of a fair share of the business is clearly indeterminate without reference to the very market forces which the Commission attempts to nullify. One obvious solution of the fair-share riddle sometimes adopted is rate parity.[16] With rates equalized, shippers will assign their business on the basis of the respective capability of the rivals in meeting specific transport requirements. But with general agreement in shippers' calculus, rate equality may leave one rival high and dry. Accordingly, rate relationships reflecting service-quality differentials are common,[17] with rail rates often below motor-carrier and above water-carrier charges. As might be expected in a system of rate differentials designed to compensate for service-quality disparities, the result often approaches an even split of the contested market, a division which, as the following statement suggests, appears to satisfy the Commission:[18]

[12] Iron and Steel Between Philadelphia and Pennsylvania, 61 M.C.C. 113, 117 (1952).

[13] Gun Wad Felt—Newark, N.J., to Anoka, Minn., 293 I.C.C. 318, 354 (1954).

[14] Drawn from the tests of "reasonably compensatory" rates laid down by the Commission in cases involving long- and short-haul discrimination under § 4.

[15] Scrap Tobacco from Newark, N.J., to Selma, Ala., 293 I.C.C. 427, 428 (1954).

[16] WILLIAMS, *op. cit. supra* note 8, at 44.

[17] *Ibid.*

[18] Paper and Paper Articles from Canton, N.C., to Atlanta, Ga., 21 M.C.C. 89, 91 (1939).

> The traffic principally moves in volume quantities and in approximately equal proportions over rail and motor carriers alike. . . . Each type has succeeded in obtaining an equal share of the traffic, and, in the absence of a showing of any compelling disadvantage, we are not persuaded that a differential in rates is justified.

Perhaps because of innate bashfulness about allocating traffic, the controlling objective is sometimes described as relationships that provide each aspirant with "a fair opportunity to compete for the traffic," patently a difference in words rather than substance, since the failure to achieve what is regarded as a fair share automatically indicates a denial of this equality of opportunity. The Commission prescribes price relationships producing a specific traffic allocation just as effectively as if it assigned percentages and tried to establish rates that would validate them.[19]

Restraints on rates "lower than necessary to meet the competition" are designed in the interest of certain shipper classes as well as of rival carriers. This protective aspect of rate control occasions efforts to "maintain established rate structures" (another key phrase in the parlance of rate-floor administration) by imposing floors designed to preserve under competition the high discriminatory prices on valuable commodities established under railroad monopoly. This policy objective is classically illustrated in a case involving tobacco rates:[20]

> While both rail and truck rates proposed may be reasonably compensatory, it is doubtful that they would contribute their fair share to the transportation burden considering the obviously high value of the traffic. To permit a further reduction by either form of transportation, or both, would only tend to increase still further the transportation burden on other traffic without giving due consideration to value of service on the traffic.

This review of Commission policy indicates an emphasis on competitive stability and on the preservation of over-all transportation revenues which is rooted in a basic conviction that unrestrained price competition would jeopardize financial stability and sacrifice the weak to the ravages of the strong. According to this view, the relatively low level of railroad out-of-pocket costs associated with the heavy overhead would permit the elimination from many markets, and maybe from business completely, of rivals who were more efficient in terms of all costs, including overhead. Financially sound transport companies are a necessary goal, but the salient features and underlying rationale of the control pattern suggest that the restrictive policies

[19] In the early postwar period, the Commission made a valiant effort to free itself from the bog of protectionism in which it has sunk. The decision in New Automobiles in Interstate Commerce, 259 I.C.C. 475 (1945), has been widely hailed as a "leading decision," but in the light of subsequent developments, it hardly deserves that lofty title. In this case, the Commission stated that there is "no warrant for believing that rail rates, for example, should be held up to a particular level to preserve a motor-rate structure, or vice versa." *Id.* at 538. The Commissioners still publicly subscribe to this doctrine; indeed, they could hardly do otherwise and even pretend to be seeking economic adjustments. See statement of Commissioner Freas, in *Hearings, supra* note 11, at 165. It will be noted that the quoted language in the *New Automobiles* case is strikingly similar to that in the rate-making rule as revised in the Transportation Act of 1958, 72 Stat. 568, 49 U.S.C.A. §§ 1231-40 (Supp. 1958), and perhaps suffers the same ambiguity spotlighted in Commissioner Hutchinson's statement discussed below. See *infra* note 36 and text to which cited.

[20] Tobacco, North Carolina Points to Southern Points, 280 I.C.C. 767, 774 (1951).

deemed necessary for revenue protection reflect rather novel interpretations of economic principles and yield highly questionable price relationships and economic results.

Rate reductions which the Commission thinks will sacrifice net revenues are denied, even though management construes the evidence to the contrary and regulatory techniques are ill-equipped to measure market reaction to specific prices. But even reductions unquestionably improving net income are apt to be found unlawful, and so the benefits of low costs are denied both to the carrier whose profits are restricted and to the shipping public through inflated rates.

This surprising and anomalous policy is based on control patterns which reflect unsound cost concepts and which improperly subordinate cost considerations to market-distribution criteria. Where costs are considered relevant, the Commission favors "fully-allocated" costs as the appropriate standard for rail rates. The economic objective of recovering overhead costs through the full array of prices does not dictate the reflection of some arbitrary pro rata share of overhead expense in any particular service, since a lower charge may yield even higher gross and net revenues. As will be elaborated below, it is a firmly-established economic principle that the significant measure for economic efficiency is incremental, or "direct," costs. Adoption of fully-distributed costs reflecting arbitrary overhead assignments leads to improper rate floors as well as to the faulty identification of low-cost and high-cost carriers. Even if Commission policies were closely oriented to cost considerations, they would frequently suffer from invalid economic content.[21]

The questionable policy of denying cost-justified reductions in the interest of some desired traffic distribution is apparently rooted in the injunction against "unfair or destructive competitive practices." Although an entirely worthy and necessary goal, the Commission's completely novel and unrealistic definition of this practice to embrace rates which increase net revenues thoroughly confuses the fruits of normal market competition with the ruinous consequences of destructive competition. The restrictive distinction between permissible reductions which simply meet competition and the undesirable ones which create it[22] is speciously rationalized as necessary to prevent a high-cost carrier from infringing unduly on the traffic of a more efficient competitor.[23] But in practice, such limitations are not confined to the relatively few cases where the high-cost and low-cost agency have been specifically identified. In any case, such an identification would be meaningless where inappropriate cost measures are employed.

Denying the carrier the advantage of its relative costs creates a rate "umbrella" protecting its competitors. Although the Commission denies that its rate policies

[21] As stated by Commissioner Freas, in *Hearings, supra* note 11, at 168: "In many instances, however, the full cost of the low-cost form of transportation exceeds the out-of-pocket cost of another. If, then, we are required to accept the rates of the high cost carrier merely because they exceed its out-of-pocket costs, we see no way of preserving the inherent advantages of the low cost carrier." As indicated, the out-of-pocket cost provides the appropriate identification of the low cost carrier.

[22] Emphasized by Professor Pegrum, *supra* note 11, at 92.

[23] Statement of Commissioner Freas, in *Hearings, supra* note 11, at 172.

are designed to protect high-cost carriers, Professor Williams concludes that "regulation has consistently . . . deprived the low-cost carrier of its cost advantage."[24] The Commission's denial appears to reflect a rather specious distinction between motive and result, with the clear implication that rate policies may have this protective effect incidental to the pursuit of some other goal.[25] But if economic criteria are applicable (and the Commission does defend its policies on economic grounds), a goal requiring the collateral establishment of uneconomic relationships must be a poor one. Whether motive or result, the uneconomic results emerge when a more efficient carrier is prevented from asserting fully its advantage of low costs.

Insulating rates from relevant cost measures necessarily entails a price inflation that is intensified by tying rail charges to motor-carrier floors based on average costs that often quadruple the rail levels. Further inflation is introduced by establishing floors based on the high value-of-service rates born of rail monopoly. Where these rates significantly exceed motor-carrier average costs, the indicated result is redundant capacity in the motor-carrier industry or pressure for cost-increasing service requirements.

Present policies serve to protect over-all revenue levels (through high rate floors) and to preserve all competitors in specific markets (by traffic sharing).[26] This approach establishes an umbrella for the whole system by efforts to render profitable any given level of investment in transport facilities, despite attainable reductions. This backward orientation toward historical investment and associated costs departs from the operation of the price system generally. It forestalls the fullest possible rationalization of the system and the elimination of such redundant capacity as may appear in response to the high rate floors, from investment mistakes, or from changed demand in specific market sectors.

B. The Control Pattern as a Policy Issue

The control pattern embracing the indicated features has been questioned by the railroads, which protest that the restraints are unjustly and uneconomically inimical to their financial interests; by shippers who deprecate the high rate floors; and by those independent students of transportation economics who feel that the allocation of traffic and resources is objectionable. It is supported, on the other hand, not only by the Commission, but by motor and water carriers and by some disinterested observers.

The doubts about regulatory policy were effectively articulated in the 1955 Report of the Presidential Advisory Committee on Transport Policy (often identified as the Weeks Committee or the Cabinet Committee), which emphasized the recent transition of transportation from a monopolistic to a highly competitive sector of the economy and the resulting obsolescence of a regulatory system that restricts instead of

[24] WILLIAMS, *op. cit. supra* note 8, at 212.
[25] See Commissioner Hutchinson's statement, Traffic World, Nov. 29, 1958, p. 38.
[26] WILLIAMS, *op. cit. supra* note 8, at 210.

capitalizes on the competitive forces.[27] The basic conclusion of the Report is that "in conformity with today's availability of a number of alternate forms of transport, Federal policies should be amended . . . to permit greater reliance on competitive forces in transportation pricing. . . ."[28]

The Report struck directly at what the Committee saw as the statutory features that buttress the obnoxious competitive restraints imposed by the Commission. It proposed to delete the rate-making rule and to revamp the national transportation policy in order to eliminate the regulatory veto of managerial discretion in setting competitive rates; to encourage rate and service experimentation; and to permit the full reflection of cost advantages, so the market might rationally determine the appropriate role of each agency. The suggested policy statement deleted the reference to "unfair and destructive competitive practices" and substituted positive injunctions "to encourage and promote full competition between modes of transportation . . . " and[29]

> . . . to reduce economic regulation . . . to the minimum consistent with the public interest to the end that inherent advantages, including *cost* and service *advantages* of each mode may be realized . . . so as to reflect its full competitive capabilities.

Although no statutory test of appropriate rate floors was proposed, the language of the Report suggested that regulation should intervene only in situations where rates fell below direct costs.

In house hearings on the Report, the motor and water carriers strongly opposed the proposals. According to the motor-carrier spokesman, the emphasizing of direct (or out-of-pocket) costs as the only statutory standard for minimum rates, as contemplated in the Report, invites ruinous competition and neglects other criteria of historical importance, particularly value of the service. In moving from value-of-service pricing toward a greater cost emphasis, competition would force some rates downward and thereby increase the burden on noncompetitive traffic and stifle the commerce of the country. In a competitive struggle, where rates gravitate toward out-of-pocket costs, the motor carriers would be victimized, since they have little noncompetitive traffic upon which to levy the costs of the competitive battle. Competition inevitably ends up in monopoly, with all shippers paying higher rates.[30]

In supporting the Report, the railroad spokesman emphasized the inequity and futility of existing restraints, since only one-third of intercity highway transportation and one-tenth of inland water transportation is subject to regulation and can be

[27] PRESIDENTIAL ADVISORY COMM. ON TRANSPORT POLICY AND ORGANIZATION, REVISION OF FEDERAL TRANSPORTATION POLICY, A REPORT TO THE PRESIDENT (1955). Space limitations require a brief and uncritical summary of the main relevant features of the Report. For excellent reviews, see Nelson, *Revision of National Transport Regulatory Policy*, 45 AM. ECON. REV. 910 (1955); Harbeson, *New Perspectives in Transport Regulation: The Cabinet Committee Report*, 52 NW. U. L. REV. 490 (1954).

[28] PRESIDENTIAL ADVISORY COMM., *op. cit. supra* note 27, at iii.

[29] *Id.* at 7.

[30] Statement of James F. Pinkney, in *Hearings Before a Subcommittee of the House Committee on Interstate and Foreign Commerce on the Report of the Presidential Advisory Committee on Transport Policy and Organization*, 84th Cong., 1st Sess. 142-60 (1955).

brought under comparable controls. But even in competing with regulated water transportation, the railroads suffer an unjustified disadvantage because of the one-sided statutory provision that a water rate lower than a rail rate shall not be deemed an unfair and destructive competitive practice. Special disabilities are also involved in competition with regulated motor transport, since it is low rates based on railroad cost advantages, the only competitive avenue open, that are inequitably and uneconomically restrained. There are no comparable restraints on the full exploitation of the truckers' service-quality superiority. An interpretation of "unfair or destructive competitive practices" that requires the fair sharing of markets yields arbitrary and uneconomic apportionment of traffic by government fiat, depriving carriers of opportunities to reflect their inherent advantages. In both equity and economics, a "fair share" can only be what the carrier would get in a fair market test. The pricing freedom yielding these desirable results would not be detrimental to shippers of noncompetitive traffic, since rates would be reduced only with the prospect of an increase in net revenue which would lessen their burden of support.[31]

Identical bills implementing the general objectives and specific proposals of the Cabinet Committee Report were introduced in 1956 as H.R. 6141 and S. 1920.[32] This legislation embraced the suggested change in the policy statement and, in addition, proposed a new rate-making rule aimed directly at the objectionable restraints by stipulating that in determining reasonable minimum rates, the Commission was not to consider their relation to the rates of, or their effect on, the traffic of any other mode of transportation or whether lower than necessary to meet competition.[33] This legislation failed to come to a vote.

A senate committee investigation of the general financial problem of the railroads led to further consideration of the competitive pricing issue. Impressed with the unfavorable implications of regulatory policies for railroad revenues, the Committee on Interstate and Foreign Commerce recommended limitations on pricing restraints that became law in the Transportation Act of 1958.[34] This Act modified the rule of rate-making, stipulating that "rates of a carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation, giving due consideration to the objectives of national transportation policy declared in this Act." This compromise is less than the railroads wanted, but not so frightening to their competitors as the previous proposals, and apparently not particularly obnoxious to the Commission.[35]

[31] Statement of J. Carter Port, *id.* at 107-42.

[32] *Hearings Before a Subcommittee of the House Committee on Interstate and Foreign Commerce on Transportation Policy*, 84th Cong., 2d Sess. (1956).

[33] § 8.

[34] *Hearings Before the Subcommittee on Surface Transportation of the Senate Committee on Interstate and Foreign Commerce on Problems of the Railroads*, 85th Cong., 2d Sess. (1958). See also SENATE COMM. ON INTERSTATE AND FOREIGN COMMERCE, 85TH CONG., 2D SESS., PROBLEMS OF THE RAILROADS, REPORT OF THE SUBCOMMITTEE ON SURFACE TRANSPORTATION (Comm. Print. 1958). *Cf.* 72 Stat. 568, 49 U.S.C.A. §§ 1231-40 (Supp. 1958).

[35] Chairman Freas indicated during the course of the hearings that the Commission would not strongly object to a proposal closely resembling that which was passed. *Hearings, supra* note 11, at 183.

It is not at all clear that this legislation will occasion any sharp changes in the present approach, particularly in view of the remarkable insistence of the Commission that it does not hold up rates to protect the traffic of another carrier, a reflection of the subtle and shadowy distinction between protection as result and as motive. Commissioner Hutchinson publicly reiterated this view after the amendment became law, suggesting the innocuousness of the change by pointing out that the Commission does not[36]

> require carriers to maintain rates at levels solely to protect competing carriers, although this may be the incidental effect . . . of the discharge of our responsibilities under the National Transportation Policy.

This advance appraisal seems to square with the language of the amendment and with its first formal interpretation by the Commission. Since the proscription regarding the effect of a reduced rate on another mode is explicitly qualified by the policy statement injunction against "unfair or destructive competitive practices," the amendment can have little meaning without a drastically new interpretation of this crucial phrase, which appears to be unlikely. The Commission has already indicated that the new rule is but one of several statutory criteria to be applied in competitive situations, and is in no sense controlling.[37]

It appears that the elimination of the regulatory restraints that impede a truly market-oriented pricing system will require more drastic legislative action than has been undertaken. The present system of controls has many objectionable features that promote an inefficient allocation of traffic and resources and inflate transport costs. On the other hand, one cannot easily dismiss the conviction of the Commission, certain carrier interests, and others that existing controls are essential to sustain transport revenues at levels consistent with the services required by the economy. Inflated costs are preferable to the predicted breakdown of the system. Are the advantages of market-oriented prices attainable in transportation?

III

PRICE COMPETITION IN TRANSPORTATION

Passing judgment on the economic issues posed by present control patterns requires a close examination of the kind of pricing behavior that might be expected to emerge in the absence of tight regulatory restraints. It is further necessary to compare this market-oriented model with the present alternative in order to determine whether the path of freedom or control yields superior economic results. Answers to the fundamental questions cannot be found in "the intent of Congress," but require reference to economic rather than legal criteria.

[36] Quoted in Traffic World, Nov. 29, 1958, p. 38. According to Commissioner Tuggle, the revised rule does spell the demise of "umbrella" rate-making. It is not clear, however, whether Commissioner Tuggle is also distinguishing motive from result. See *id.*, Nov. 15, 1958, pp. 27-29.

[37] In a decision involving rail-motor competition for bulk petroleum products, cited in Railway Age, Feb. 23, 1959, p. 49.

A. Economic Concepts

At the heart of the uncertainty regarding interagency competition is the determination of the appropriate relationship between prices and costs for the various agencies. And there is little hope of achieving meaningful areas of agreement on this question without firmly establishing the relevance for pricing purposes of the various cost measures. The basic distinction is between those costs that can and cannot be traced to particular units of output. As previously indicated, transportation parlance has generally settled on "out-of-pocket" costs to describe the former and "overhead" or "burden" to indicate the latter. It has also been noted that the addition of some arbitrary or pro rata share of the overhead to the out-of-pocket cost for a given block of output produces "fully-allocated" or "fully-distributed" costs. The out-of-pocket costs are thus incremental costs, since they are directly associated with the production of additional units of output.

At the core of social efficiency in resource use is the concept of incremental costs, which measure the value of the resources used up in providing output. Economizing scarce resources requires that additional units of output be worth more than the cost of producing them as measured by marginal costs, or the addition to total cost occasioned by some (very small) addition to output. It is significant that this optimizing goal is achieved without reference to those fixed or "overhead" costs that are unaffected in total by output changes. As Professor Samuelson puts it for the embryonic businessmen in economics principles courses:[38]

> Let bygones be bygones. Don't look backward. Don't moan about your sunk costs. Look forward. Make a hard-headed calculation of the *extra* costs you'll incur by some decision and weigh these against the *extra* advantages. Cancel out all the good things and bad things *that will go on anyway* whether you make an affirmative or negative decision on the point under consideration.

Incremental costs, whether measured at the margin of output (which is extremely difficult in practice) or for larger increments through out-of-pocket costs, are crucial for interagency competition.[39] For example, diseconomy will result from the expansion of motor-carrier investment for a production job that a railroad in being can perform, unless the decision to invest is made with reference to rail incremental costs. In market terms, the investment decision should hinge on relative prices

[38] PAUL A. SAMUELSON, ECONOMICS 468 (1958). See his ch. 24 for an elucidation of the principles relevant here.

[39] For a discussion of the conceptual relationship between out-of-pocket costs as used in transportation parlance and marginal costs, see Wilson & Rose, *Out-of-Pocket Cost in Railroad Freight Rates,* 60 Q. J. ECON. 546 (1945). The term is often employed by the Commission to denote average variable cost of additional blocs of traffic. *Id.* at 549. Out-of-pocket cost will approach marginal cost only if the bloc of traffic involved is very small or if marginal cost is rather constant. This suggests that in the very possible case of rising marginal cost, out-of-pocket cost of larger traffic increments will be below marginal cost, and prices predicated on the former will be too low. This poses the practical problem of urgently-needed refinement in the concepts and techniques of cost measurement—a problem that is clearly beyond the scope of this paper. We will employ the terms "incremental cost" and "out-of-pocket cost" with the implication of the best attainable cost measurement. In the specific analysis which follows, we assume away the problem by positing constant marginal costs, a simplification which does not affect the principles adduced.

which reflect the respective outlays associated with each alternative. The appropriate measure on the railroad side is out-of-pocket costs. In the interests of social efficiency, the investment should not be made unless the motor carrier would get the business at a price covering all costs (including investment costs, which are in this case "incremental") in competition with a rail rate as low as out-of-pocket costs. As this illustration suggests, sterilization of this cost measure nullifies a crucial investment guide.

Letting bygones be bygones supports the economic logic of equating all transport prices to marginal costs, as has been proposed by some students of welfare economics.[40] But for the railroad industry, which is characterized by large fixed overheads, this pricing policy would leave some costs uncovered and necessitate subsidy if society is to have the services it requires and is willing to pay for. Subsidies to cover overhead are questionable on equity grounds and are probably not politically feasible. An economically defensible alternative is differential pricing, which has historically characterized railroad rates (and which has been adopted, to a large degree, by motor carriers, despite insignificant overheads). The overhead is assessed to particular services on the basis of demand considerations; those services with the least elastic demands bear the highest rates relative to incremental costs.[41] This pricing system has the virtue of encouraging utilization of railroad fixed facilities, the costs for which are sunk, and permitting full or maximum coverage of the overhead.

Although the roots of differential pricing lie in monopoly, the rise of interagency competition does not spell its demise by driving all rates to the level of average total costs. Since motor- and water-carrier services are not uniformly substitutable for those of the railroads, railroad demand functions retain some elasticity differentiations. Interagency competition thus occasions a modification in the pattern of discrimination by driving rates downward (and some more than others), but not its elimination. In competitive situations, rates will commonly gravitate toward the costs of the rivals, rather than toward those of the railroads themselves.

The foregoing considerations suggest that the concept of "fully-allocated" or "fully-distributed" cost is economically sterile for railroad pricing and no less so for the other carriers, although the small overheads take it less far from the mark. It is apparent that overhead costs per output unit are price-determined and not price-determining. The overhead element per unit varies inversely with volume, which, in turn, is a function of price. It is, therefore, a meaningless product of circular reasoning to establish as a norm for railroad rates a sum composed of unit out-of-

[40] See, *e.g.*, Hotelling, *The General Welfare in Relation to the Problems of Taxation and of Railway and Utility Rates*, 6 ECONOMETRICA 242 (1938).

[41] Professor Merton Miller is critical of railroad discrimination, identifying cases where shippers assessed high discriminating rates would pay less, not more, under uniform monopoly pricing. Miller, *Decreasing Average Cost and the Theory of Railroad Rates*, 21 So. ECON. J. 390 (1955). As will be apparent, the pattern of differential pricing which would emerge from the principles advocated in this paper departs markedly from the third-degree monopoly discrimination with which Miller deals. The former specifically contemplates that competitive forces should press down these high rates; if not, they should be reduced by regulation.

pocket cost plus a pro rata share of the overhead. In the interests of revenue conservation, a company must add to out-of-pocket costs an amount which reflects demand conditions and commonly produces a price either more or less than the amount given by a mechanical statistical allocation of the overhead burden.[42] In many circumstances, a rate lower than the fully-distributed costs yields a greater total contribution to profit than one which equates with this statistical allocation. The Commission's observations that "the overhead costs are just as real as direct costs" and that "the overhead contribution must come from somewhere," with the direct implication that rates below fully-distributed costs deplete net revenue, may be good law, but they are poor economics.

B. A Model of Competitive Pricing in Transportation

Regulation has restrained the adjustment of differential pricing to the new market conditions associated with the rise of interagency rivalry by holding rates higher than they would be otherwise. This raises the fundamental question whether an economically meaningful equilibrium of prices can be established without the kind of restraints presently exercised. It is the position of this paper that a realistic application of economic principles indicates that, with certain reasonably attainable conditions, such an equilibrium can be achieved.[43]

The first essential condition is that the market rivals act rationally to pursue company interests by endeavoring to maximize profits or net revenues. The path leading to maximum profits is depicted in elementary terms in chart one, which shows a negatively inclined demand curve (DD) and the derived marginal revenue curve (MR). (Following the previous definition of marginal costs, marginal revenue is the addition to total revenue associated with an increment of sales.)[44]

It is apparent that profits are highest from sales at output (Q) and price (P), where marginal revenue equals marginal cost. To the left of that point, additional sales add more to revenues than to costs. (The marginal revenue curve lies above the marginal cost curve.) To the right of that output (where marginal revenue is below marginal cost), additional sales add less to revenue than to cost and subtract from total profits.

[42] Determination of the appropriate cost reference is plagued not only by the conceptual differences and expectable quantitative gaps between marginal costs and commonly-employed measures of out-of-pocket costs, referred to in note 39 *supra*, but also by the distinction between long run and short-run out-of-pocket levels. This, too, represents a problem of cost measurement and application that is not crucial for our analytical purposes. However, it is worth noting that the out-of-pocket measures produced by the Commission's costing staff reflect long-run conditions and thus embrace the full investment requirements imposed by output expansion over extended periods. While the interests of both the firm and society require that long-run prices recover such costs, a case can be made for reflecting in price shorter-term out-of-pocket costs in the face of short-run excess plant capacity if demand conditions require. The feasibility of such departures from long-run requirements depends on the degree of price flexibility permitted by market, institutional, and regulatory forces.

[43] The applicability of the assumptions required for stability is more closely examined below.

[44] For analytical simplicity and to equate marginal and out-of-pocket costs, this chart and the following analysis employs constant marginal cost. The influence of different cost assumptions will be considered below.

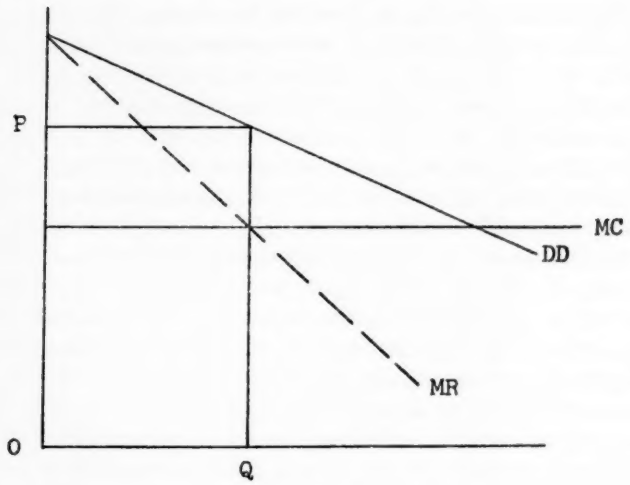

CHART I

Goals alternative to profit-maximizing include securing the largest possible share of the market or the highest sales (gross revenues) consistent with some acceptable profit level. Chart one suggests that the probable result of pursuing these alternative objectives is a price lower than dictated by maximum profit and a tendency to drive prices down to marginal costs.

Equilibrium also depends in some cases on traditional demand functions, under which the pricer can sell progressively more at successively lower prices, with the rival's price fixed at a certain amount. This condition is violated by a market embracing only one buyer who does not share his traffic in some proportion depending upon relative prices, but insists on allocating all to one or the other. In some cases, "all or nothing" markets may create competitive instability, since, with any given price relationship, one rival is foreclosed from the market. Each competitor has, therefore, every profit incentive to reduce prices to get the business, and successive retaliatory reductions may take rates down to the lower direct costs of the two rivals. As will be indicated, the effect of such markets on stability depends on the comparative service qualities and the margin between the direct costs of the competitors.

A further requirement for the realization of the pricing relationships developed in the model is a working knowledge of the basic facts on which the optimum depends, including costs, market size, potential shipper reaction to various pricing relations (demand functions), and rivals' pricing limits as measured by direct costs.

The kind of pricing patterns that might be expected in free transport markets will reflect the limited number of sellers, representing the economist's condition of oligopoly. Most commonly, pricing authority is lodged in the rate bureaus of the competing agencies, and the markets are more appropriately characterized as duo-

polistic. The following models are based on the duopoly case. Departure from duopoly resulting from the intrusion of the competition associated with independent pricing action and with proprietary and exempt transportation would alter the maximizing references and produce lower prices than indicated, but would not prevent an equilibrium adjustment at nonruinous levels. If an oligopolist (or duopolist) attempts to increase his sales and revenues by reducing prices, he may invite retaliation (matching reductions), with the market shared as before, but at lower prices and possibly smaller revenues. Under these circumstances, price behavior is highly dependent on the firm's assumptions regarding his rivals' responses to his initiative.[45] The duopolistic rivalry portrayed reflects the assumption that reductions will be initiated when it appears that they will be profitable even with retaliation. (They will, of course, be even more profitable without retaliation). Consistent with the profit-maximizing motive, it is further assumed that the rival will retaliate only within the limits imposed by his cost and demand functions. Retaliation is not equated with "matching reductions" because of the previously specified interagency variation in demand and cost relations. Some market situations will be noted where profit interests dictate the advisability of "sitting tight" in the face of expected retaliation.[46] There seems to be substantial empirical support from postwar pricing history in transportation for the retaliation assumption.

The competitive models presented reflect several simplifying conditions. One is that the rivals are confronted with a market represented by a fixed number of tons tendered per time period. This simplification overlooks the potential expansion of the total market with lower prices from the increased sales of shippers affected by the reduction, either through increased purchase of the product or the attraction of business from other producers. But the latter occasion would probably induce corresponding rate reductions from these competitive sources to common markets precisely to forestall this development, and the former is not apt to be important, particularly for the high-grade manufactured articles that are at the center of rail-motor price competition. To the extent that the total market would be enlarged by reductions, the fixed-size assumption understates the gross and net revenues associated with lower rates and inflates the equilibrium price. (In terms of profit-maximizing apparatus, the equilibrium position would be moved to the right.) This force, however, would not vitiate the competitive stability described.

The second simplifying condition is constant incremental (out-of-pocket) cost over the relevant ranges of ouput. In the likely case of rising costs,[47] the profit advantage of lower rates would be curtailed. (In graphic terms, the equilibrium position would

[45] For a general discussion of duopoly and oligopoly, see GEORGE J. STIGLER, THE THEORY OF PRICE chs. 12-14 *passim* (1946).

[46] These cases are of no concern for minimum rate control, but may represent problems for maximum rate regulation because of their similarity to the monopoly exactions associated with duopolistic collusion. This problem will be considered in more detail below. Tacit collusion may represent a greater problem in transport markets than in industry generally, since the high prices do not have to be "achieved," but have actually been enforced and stabilized by government sanction in many cases.

[47] See Wilson & Rose, *supra* note 39, at 557-58.

shift to the left.) Recognition of increasing incremental costs does not undermine competitive stability, but indicates a higher equilibrium price. In general, the two simplifying conditions are mutually offsetting.

According to the following analysis, the goal of profit-maximization, coupled with a disposition of the market progressively to alter the division of business between rivals in accordance with their price relations, permits a stable price equilibrium at levels not ruinously encroaching on direct costs, but below the high discriminating monopoly prices originally established by the railroads. This equilibrium derives from the fact that the cost of expanding output and sales at the expense of a competitor soon exceeds the gain, since the lower prices that achieve this expansion must also be accorded to present customers who are willing to pay more.

The hypothetical cases developed represent some well-known cost and demand relations associated with rail-truck competition, but the underlying principles should be equally applicable to rail-water rivalry. In case one (table one), it is assumed that the railroad (or railroads in the case of oligopoly with joint pricing) has lower direct costs (seventy cents compared with ninety cents per hundred pounds), but that the motor carrier offers a preferred service, so that equal prices will yield the railroads very little of the business. The total market is represented by 1,000 tons per time unit.

Because the services are substitutes, the sales of each rival will be a function of the other's price. As shown, if both competitors charge one dollar per hundred pounds, the railroad will handle 100 and the motor carrier 900 tons. Assuming the motor-carrier rate remains fixed at that level, the railroad can increase sales to 150 tons at a rate of ninety-five cents, to 250 tons at ninety cents, and so on.

Similarly, with a rail rate of one dollar, the motor carrier can pre-empt the market by cutting to ninety-five cents. The table also shows the contribution to profit (the excess of associated revenues over associated costs) attributable to each price and volume combination. For example, the 100-ton rail output at the one-dollar rate yields a net of thirty cents per hundred pounds, or a total of $600; whereas 250 tons at ninety cents yields a total of $1,000.

With the motor-carrier rate held at the initial $1.00 level, the railroad can increase its net contribution from $600 to $1,700 by cutting to eighty cents. Truck net, which falls from $1,800 to $300, can be restored to $450 with a ninety-five-cent rate, reducing rail volume from 850 to 550 tons and contribution from $1,700 to $1,100. With this market distribution, neither rival has any further reducing incentive, and true equilibrium is established at a nonruinous level, with each sharing in the market. The cost and demand relations portrayed in this case are representative of the significant market sector embracing medium-distance hauls of truck-load quantities, where the railroads may be expected to have lower incremental costs and the trucks a preferred service.

As illustrated in case two (table two), a sufficient incremental cost advantage not offset by compensating service advantages may permit the low-cost carrier to profitably pre-empt the market. In this instance, the out-of-pocket costs are again ninety

TABLE I

CASE I—RAILROAD COST ADVANTAGE, MOTOR-CARRIER SERVICE ADVANTAGE

Rail rate (per hundred pounds)	RAIL VOLUME AND NET CONTRIBUTION[a]								TRUCK VOLUME AND NET CONTRIBUTION[b]							
	Truck rate (per hundred pounds)								Truck rate (per hundred pounds)							
	$1.00		$.95		$.90		$.85		$1.00		$.95		$.90		$.85	
	V	C	V	C	V	C	V	C	V	C	V	C	V	C	V	C
$1.00	100	$ 600	0	$ 0	0	$ 0	0	$ 0	900	$1800	1000	$1000	1000	$ 0	1000	$ 0
.95	150	750	100	500	0	0	0	0	850	1700	900	900	1000	0	1000	0
.90	250	1000	150	600	100	400	0	0	750	1500	850	850	900	0	1000	0
.85	550	1650	250	750	150	450	100	300	450	900	750	750	850	0	900	0
.80	850	1700	550	1100	250	500	150	300	150	300	450	450	750	0	850	0
.75	1000	1000	850	850	550	550	250	250	0	0	150	150	450	0	750	0
.70	1000	0	1000	0	850	0	550	0	0	0	0	0	150	0	450	0
.65	1000	0	1000	0	1000	0	850	0	0	0	0	0	0	0	150	0

[a] Assumed out-of-pocket cost, 70 cents per hundred pounds.
[b] Assumed out-of-pocket cost, 90 cents per hundred pounds.

Legend: V—volume transported in tons.
C—contribution to net revenue.

TABLE II

CASE II—RAILROAD COST ADVANTAGE, SERVICE-QUALITY PARITY

Rail rate (per hundred pounds)	RAIL VOLUME AND NET CONTRIBUTION[a]								TRUCK VOLUME AND NET CONTRIBUTION[b]							
	Truck rate (per hundred pounds)								Truck rate (per hundred pounds)							
	$1.00		$.95		$.90		$.85		$1.00		$.95		$.90		$.85	
	V	C	V	C	V	C	V	C	V	C	V	C	V	C	V	C
$1.00	500	$3000	250	$1500	0	$ 0	0	$ 0	500	$1000	750	$ 750	1000	$ 0	1000	$ 0
.95	800	4000	500	2500	250	1250	0	0	200	400	500	500	750	0	1000	0
.90	1000	4000	800	3200	500	2000	250	1000	0	0	200	200	500	0	750	0
.85	1000	3000	1000	3000	800	2400	500	1500	0	0	0	0	200	0	500	0
.80	1000	2000	1000	2000	1000	2000	800	1600	0	0	0	0	0	0	200	0
.75	1000	1000	1000	1000	1000	1000	1000	1000	0	0	0	0	0	0	0	0

[a] Assumed out-of-pocket cost, 70 cents per hundred pounds.
[b] Assumed out-of-pocket cost, 90 cents per hundred pounds.

Legend: V—volume transported in tons.
C—contribution to net revenue.

cents for rail and seventy cents for truck; but at rate-parity, the market will be evenly divided. By cutting from one dollar to ninety-five cents, the rail volume can be increased to 800 tons and the associated contribution advanced from $3,000 to $4,000. This action, however, reduces truck volume to 200 tons and contribution to $400; but by cutting to ninety-five cents, the original division will be restored and a revenue contribution of $500 salvaged. But the indicated railroad response to the resulting decline of contribution to $2,500 is another drop to ninety cents, which pre-empts the bulk of the market and increases contribution to $3,200, more than initially realized. This case is representative of long hauls of truck-load quantities, where services are often comparable, but railroad costs are lower. The same result (pre-emption) is to be expected with equivalent costs and significant service disparities, and particularly with cost and service advantages working in the same direction. A likely example is short hauls of truckloads, and especially less-than-truck-load shipments.

These two cases have included either or both cost or service disparities. Even with equality in these factors, however, a market system can produce a unique price relationship that maximizes for both rivals at levels significantly above incremental costs. In case three (table three), the market is shared equally at any identical price for both competitors whose incremental costs are eighty cents per unit. At the one-dollar rate, each can improve net revenues (assuming the rival's price is fixed) by cutting his price to ninety-five cents. If one cuts and the other then follows, each will realize a $1,500 contribution to net, and neither can improve his position by a further reduction, whether matched or not.

According to these illustrations, the price aggressor may or may not be better off with the rates and revenues yielded by the equilibrium than with higher rates. In case two, the railroad profits more at the equilibrium rate, netting $3,200 instead of $3,000. The margin of profit of the equilibrium rate over the initial rate is even greater in case one. In case three, representing cost and service equality, however, the intial one-dollar rate produces $2,000 net, while the ninety-five-cent rate yields only $1,500. In the circumstance represented by cases one and two, the railroad's assumption regarding the rival's price policy is immaterial, since it will be better off even with retaliation. But if the initial price is high enough, active competition is unprofitable. For example, if the original rate in case two had been $1.15 instead of one dollar, the 500-ton output at a margin of forty-five cents would yield a net of $4,500, higher than realized at any lower price, with or without retaliation. Even in case one, it would be necessary to assume an original price of only $1.30 instead of one-dollar to occasion a higher yield from the 100-ton share ($1,200) than from the 550-ton share at the equilibrium price (yielding $1,100). This $1,200 net can be exceeded only in the unlikely event of unmatched reductions to eighty or eighty-five cents. So with perfect knowledge of the market and the expectation of retaliatory price cuts limited only by the rival's out-of-pocket costs, the railroad, as well as the motor carrier, would do well to sit tight. This case clearly is of no interest for minimum rate control.

TABLE III

CASE III—COST AND SERVICE EQUALITY

Rail rate (per hundred pounds)	RAIL VOLUME AND NET CONTRIBUTION[a]								TRUCK VOLUME AND NET CONTRIBUTION[a]							
	Truck rate (per hundred pounds)								Truck rate (per hundred pounds)							
	$1.00		$.95		$.90		$.85		$1.00		$.95		$.90		$.85	
	V	C	V	C	V	C	V	C	V	C	V	C	V	C	V	C
$1.00	500	$2000	250	$1000	0	$ 0	0	$ 0	500	$2000	750	$2250	1000	$2000	1000	$1000
.95	750	2250	500	1500	250	750	0	0	250	1000	500	1500	750	1500	1000	1000
.90	1000	2000	750	1500	500	1000	250	500	0	0	250	750	500	1000	750	750
.85	1000	1000	1000	1000	750	750	500	500	0	0	0	0	250	500	500	500
.80	1000	0	1000	0	1000	0	750	0	0	0	0	0	0	0	250	250

[a] Assumed out-of-pocket cost, 80 cents per hundred pounds.

Legend: V—volume transported in tons.
C—contribution to net revenue.

There is always the possibility, however, that reductions will be set in motion through inadequate knowledge or the pursuit of nonmaximizing goals. In the Commission's view, a reduction of the rail rate from $1.30 to the ninety-cent equilibrium price in case one represents a "needless sacrifice of revenue." But before characterizing reductions toward the equilibrium as "destructive" and "eroding revenues" in some way inimical to the public interest, consideration should be given to the fact that these high discriminating monopoly prices originally established by the railroads can be maintained under competition only by tacit duopolistic collusion.[48] Since a "normal" return is precisely that which is realized under competition, there is no apparent justification for continuing these monopoly exactions.

The pricing system described embraces the following salient features:

1. A highly significant characteristic of the price relations is a stable equilibrium well above direct costs for at least one rival. Notably absent is the disorderly gravitation of prices for all producers that spells ruinous competition. This historically-illustrated competitive characteristic associated with the railroads' high fixed costs need not arise when railroads (acting collectively) compete with another mode. Nor are the price instabilities noted in the motor-carrier industry in its infancy period and during the depression of the 1930's relevant for motor-rail competition.

2. This pricing system contemplates that each agency will maximize its net revenues within the limits imposed by its cost levels and service capabilities relative to other rivals in the market. It is market-oriented, since each rival gets no more and no less than the market will accord it in terms of its evaluation of the worth of the services performed.

3. This system departs rather sharply from the price relationships prevailing under regulation. The rates would be generally lower than administrative price floors,[49] although in markets with very high rates, tacit understandings could forestall reductions. Some market-sharing would remain, but with different price relations and empirical shares. Unlike regulation, it contemplates pre-emption of markets by one rival where cost and service relations so dictate, possibly with revenues greater than realized with the market shared at higher prices.

C. Economic Validity of the Pricing Pattern

Modifications in price relations along the lines suggested would substantially alter traffic allocation. Such shifts spring inevitably from the basic difference in concept of market-oriented and administratively-determined prices. The market is impartial as among alternative producers, tapping for a given job that one which can provide transport service of a given quality at the lowest price. Regulation, on the other hand, can scarcely avoid introducing a bias. This is well illustrated in case one, where

[48] STIGLER, *op. cit. supra* note 45, at 269-77.

[49] For an analysis of the price-increasing aspect of price floors imposed under California regulation, see Nicholson, *Motor Carrier Cost and Minimum Rate Regulation*, 72 Q. J. ECON. 139 (1958).

the motor carrier prefers prices equalized at one dollar to any other adjustment shown. The railroad, on the other hand, profits most by charging eighty cents in combination with a one-dollar motor-carrier rate. But according to market dictates, the best the competitors can mutually do is a rail rate of eighty cents and a motor-carrier rate of ninety-five cents. Imposing any other relationship must arbitrarily favor one or the other by holding the rail rate above eighty cents or the truck rate above ninety-five cents, in direct violation of "impartial" regulation.

Although it is impossible quantitatively to assess the traffic shifts that might be associated with competitive pricing, movements both ways between the rail and nonrail carriers would probably result. It is extremely likely, however, that the balance would favor the railroads, with the substitution of market-oriented prices that reflect railroad costs for an administered system that stifles them. Although not equated with incremental costs as in a perfectly competitive market, the rates are deeply rooted in this highly relevant cost measure. Lower prices would commonly be associated with lower direct costs and traffic channeled to the low-cost carrier, unless (and to the extent that) quality considerations reflected in market evaluations should override the cost differential. This is the expected orientation in the operation of the price system in the economy generally. More expensive alternatives are purchased accordingly as their superior quality is evaluated in the market. Producers combining higher quality with higher costs can survive; those associating lower quality and higher costs cannot. There seems little question that the alteration described would promote a more economic traffic allocation.[50]

In addition to the traffic shifts, over-all prices will generally be lower than under the present pattern, but certainly not at levels that could be considered "ruinous." Although lower rates clearly benefit affected shippers (and, hopefully, consumers of the end products), the problem of compensating increases on other traffic must be considered.[51]

Although apparently overlooked by the Commission, the concern about compensating increases, based on considerations of overhead support for a large fixed plant, must have little relevance for the nonrail carriers where a rather intimate adjustment of firm size and output is possible. The railroads presumably maintain the rates in question at relatively low levels because they are more profitable than higher charges would be. For example, coal is so favored because of rather elastic transport demands dictated by the high ratio of rates to final price in combination with the substitution potential of alternative energy sources. Where the lower rates are at maximizing levels predicated on such market conditions, it would be quite fruitless to raise them simply because others had been lowered. Nor would any

[50] The system of allocating traffic is not consistent with that envisioned by those who advocate regulatory establishment of rate differentials based on cost differences. See, *e.g.*, Hultgren, *The Nature of an Economical Division of Traffic*, in TRANSPORTATION AND NATIONAL POLICY 129 (1942). Such price relationships, however, are not market-oriented and could be maintained only by government fiat. It seems, however, to resemble that envisioned, among others, by Professor Pegrum, as reflected in *supra*, note 11, and in other writings.

[51] We are not concerned here with rates below direct costs, which should be increased in any case.

directly-related occasion arise to raise them in the general case where reductions would increase traffic volume and net revenues. With the profit-maximizing goal and workable market knowledge, reductions from the only monopoly levels which decrease net would probably be relatively rare and thus overbalanced by the gains.

However, regardless of this balance and quite independent of contemplated reductions, there is a strong case for raising rates which are below net-maximizing levels, unless over-all earnings are considered excessive; such charges do "cast a burden on other traffic" and contribute to the presumed need to maintain the high discriminating monopoly rates. Obviously, this does not imply rates on low-grade commodities that will stifle their movement; low "ability to pay" will be correlated with relatively low maximizing rates. It does, however, question the special treatment arbitrarily accorded some traffic without reference to the generally-governing cost and demand relationships.

Although not conceivably working an injustice on other shippers, the competitively-induced rate reductions would probably shrink the total amount spent and the total support provided by society for transport activities at present output levels. It should be apparent, however, that a decrease in total outlays does not necessarily bring the "inadequate transport system" that so worries the Commission. It is not a question of "starvation wages" for the existing system, since over-all cost savings from more efficient traffic distribution would reduce support requirements. This is illustrated in case one, where the distribution associated with the initial matched price of one dollar (assumed to be administratively fixed) incurs total direct costs for the two carriers of $17,600, well above the $15,800 associated with the equilibrium adjustment.

But aside from such cost savings, market-oriented prices carry no guarantee that the revenues realized by any firm or agency will support any particular level of past investment. Such transport prices, like those in the economy generally, are essentially and appropriately forward- and not backward-looking. Utilizing public authority to exact revenues to support fully any given level of plant investment is to put the shoe on the wrong foot. Rather, the revenues realized from market-oriented prices provide the essential and only reliable guide to appropriate investment levels. There is little reason to distrust as inherently inadequate the economy's support for transportation dictated by competitively maximizing prices. As in other sectors of the economy, the market will support the transport services it requires.

Although present volume could doubtless be efficiently accommodated by smaller plant investment, the indicated adjustment would probably in practice be effected by reduced investment requirements for future output levels associated with the general economic growth. But it is desirable to consider the extreme case of actual contraction in order to clarify the principles.

The rule of market support from forward-looking prices applies as much to railroads as to the other agencies, despite the high fixed costs of the former. Failure to realize full support for existing investment levels calls for sloughing-off marginal

facilities and for financial rationalization to bring capital structures and associated capital costs in line with earnings potential.[52]

But, as indicated, the adverse competitive impact would probably fall on the motor and water carriers which are not in any sense uneconomically or inequitably disadvantaged by reduced rates that are profitable to the railroads. Rather, equity as well as social efficiency requires full exploitation of the relatively low railroad direct costs. Failure to do so by imposing price floors unrelated to costs spells overinvestment in nonrail facilities and redundant transport capacity. The employment of public authority to perpetuate the resulting windfalls is hardly warranted by equity or economics. Transportation companies cannot reasonably be exempted from the risks of defeat that are an inevitable aspect of playing the economic game under the impartial rules of competition.

A readjustment in transport investment, which might take the form of either or both fewer or smaller firms, carries no serious threat to the public welfare. Clearly no real diseconomy results from fewer firms in any industy nor from smaller ones in these industries. Since motor carriers particularly are characterized by the absence of scale economies, companies do not have to be big to be efficient or profitable and relatively small total demands can be recognized by forthcoming capacity supply.[53] Even presently-specialized motor-carrier services (such as those of the petroleum haulers) can be maintained by general commodity haulers according to standards the market will support.

But it is easy to overdraw this gloomy picture. Aside from the cushion of constantly-expanding transport demand, the motor carriers have much captive traffic from new plants without direct access to rail facilities, would gain volume from the private and exempt sectors with the erosion of the high value-of-service rates, and would commonly share many markets on the strength of their common service and occasional cost advantages. While perhaps more vulnerable, the water carriers are protected by their toll-free use of publicly-provided right-of-way. Since the rail overhead burden arises largely from the investment associated with privately-provided fixed facilities, the "full" costs of water carriers closely corresponds conceptually to railroad out-of-pocket cost.

The contemplated pricing system would involve lower costs, lower prices, and smaller investment requirements for present output levels and would encourage a more rational pattern of future investment for output expansion. A market-oriented system of competitive prices would appear to yield revenues adequate to support the quantity and quality of service required with a minimum of redundant capacity.

[52] It is certainly vital, however, that any such liquidation be preceded by the kind of regulatory reforms contemplated here to avoid too severe cutbacks that would scrap facilities more efficient than some that were continued in production. For a stimulating discussion of the technical and cost potentialities of railroads with adequate traffic to nourish them, see JOHN W. BARRIGER, SUPER-RAILROADS FOR A DYNAMIC AMERICAN ECONOMY (1956).

[53] For empirical investigations of the relationship between motor-carrier size and efficiency, see Roberts, *Some Aspects of Motor Carrier Costs: Firm Size, Efficiency, and Financial Health*, 32 LAND ECON. 228 (1956); ROBERT A. NELSON, MOTOR FREIGHT TRANSPORT FOR NEW ENGLAND (New England Governors' Comm. on Public Transportation Rep. No. 5, 1956).

D. Applicability of the Model

Assuming the beneficent results ascribed to price competition, a very important question is whether it might be expected to show in practice the admirable characteristics described in the model. Its real-world applicability depends largely on the validity of the crucial assumptions employed: pursuit of the profit-maximization goal, an approximation of traditional demand functions, and reasonably accurate command of basic market data.

The profit-maximization goal is not always relentlessly pursued by business generally. Professors Baumol and Lanzillotti independently identify common adherence to other goals, such as total revenue maximization consistent with realizing some predetermined rate of return less than the maximum attainable.[54] It may be that nonoptimizing goals influence railroad pricing policy, although such forces must be mitigated by the inability of many companies to earn what is generally regarded as a normal return. An emphasis on largest attainable volume is consistent with historically-chronic underutilization and the implicit assumption that profit interests are best served by the largest possible volume of business (a generalization of limited validity). Such an emphasis would be strengthened by railroad organization which typically places pricing authority and sales in the hands of the same executive, who is more readily judged by favorable volume trends (his sales effort) than by the judiciousness of his pricing policies. But regardless of past policies, there is growing evidence of increasing railroad emphasis on maximizing net revenues. Statements of railroad spokesmen in the hearings cited above and in public addresses recurrently emphasize efforts to improve this financial measure. With railroad earnings as they are, an active pursuit of profit-maximization may be expected as a result of new pricing insights developed from the highly intensified interest in market research.

The frequency in Commission cases of altered volume and market shares in response to changed price relationship attests to the essential validity of the demand function assumption in typical markets involving rail-motor competition. Since this demand condition is facilitated in markets with numerous shippers, it is significant that virtually all of the important competitive rate adjustments since 1950 have been applied on a region-wide basis. But there are probably some markets, particularly in the rail-water competitive arena, that consist of one shipper who will not divide his traffic or of a small number of shippers who react identically to specific price relationships. But such "all or nothing" markets are ruinous only if prices are driven down to levels approaching the direct costs of the low-cost carrier because of narrow cost differentials or compensating service advantages. With a reasonable margin between the high and low costs and without offsetting quality considerations, the result will approximate that suggested in case three, where competitive stability is achieved from foreclosure of the disadvantaged rival at nonruinous rates. Although extensive empirical research would be desirable, it does not

[54] Baumol, *On the Theory of Oligopoly*, 25 ECONOMICA 187 (1958); Lanzillotti, *Pricing Objectives in Large Companies*, 48 AM. ECON. REV. 921 (1958).

seem probable that "all or nothing" markets with ruinous attributes are sufficiently significant to condition general policy.

Obtaining adequate knowledge of costs and demand to achieve pricing goals is a general problem plaguing all industries. Although transport companies have not been aggressive in developing techniques to gain these insights, the railroads, whose actions are most crucial for price competition, are now more heavily committed to developing market information. Certain facilitating circumstances make the achievement of a working knowledge of market structures easier for transportation companies than for those in most other industries. Industry efforts profit from the cost research of the Commission's staff and from the traffic flow and rate data provided in the waybill summaries. Because of the detailed reporting requirements imposed on regulated industries, these companies have an unusual opportunity to develop data regarding rivals' operations. The forum provided by the rate bureaus is valuable for eliciting information regarding customer reactions to specific price relationships. Furthermore, the legitimacy of group-pricing may itself be significant in permitting an intimate pooling and evaluation of information. Finally, the calculus itself may be simpler than for industry generally, since transport companies can measure total market size more easily than producers of consumers' goods who compete for dollars with a whole spectrum of alternatives.

The evidence seems rather convincing that transport markets can be expected to perform sufficiently closely to the model to permit effective price competition. Perfection, a virtually unattainable goal in pricing problems, is not essential; stability requires only reasonably competent management efforts to serve the interests of their companies. The attainability of the stability requirements and the magnitude of the advantages of a market-oriented system of competitive prices warrant the conclusion that present regulatory restraints are not in the public interest.

IV

THE APPROPRIATE ROLE OF REGULATION

Policy decisions regarding transport competition should reflect the rather generally-accepted presumption underlying our free-enterprise system that reasonably effective market controls are superior to government controls, which should be instituted only on the basis of a clear showing that they are required in the public interest. Controls should be undertaken only to preserve and strengthen the system; any gratuitous intervention not directed to this end saps its strength. The evidence is persuasive that such controls over transport competition are not required and are actually detrimental, indicating the need for drastic limits on the scope of regulation.

Although a withdrawal of regulation from the general administration of price competition would serve the public interest, two problem areas require special consideration. The first is the instability that may arise in "all or nothing" markets.

Although probably not sufficiently serious to condition general policy and justify present controls over all price competition, this problem should not be ignored. It calls for extensive investigation to determine the relative importance of markets where cost and service relations are apt to dictate close encroachment of rates on the out-of-pocket costs of the low-cost carrier. Perhaps formal measures could be devised to identify such special situations requiring regulatory floors. This departure from basic policy should be based on a clear-cut indication of significant revenue-eroding effects of such markets.

The other problem in a system of pricing freedom is the prevention of truly destructive competition reflected in predatory actions designed to destroy a rival with less staying power by intentionally suffering short-term losses. Regulation should be held ready to deal with these situations by the exercise of antitrust techniques if they should arise. Although such pricing policies pose difficult control problems that have not yet been effectively solved, the simple recognition that restraint should be applied to this behavior and not to all price reductions would signify an important advance in transport control. An imperfect but reasonably adequate test to identify predatory action is the establishment of rates below direct costs. Consideration might be given to applying generally the statutory rule covering rail-water competition by placing ceilings on rates that fall below a certain minimum to prevent their increase if the competition is destroyed.

These two areas represent aberrations from the general case of workable price competition. More important than its restrictive efforts in these situations is a second basic function of regulation: to help make competition work through counsel and research. This function, commonly performed by government in such areas as agriculture, commerce, and labor, entails further cost and market research to assist the carriers with their pricing problems. If it would provide comfort to the skeptics, it might be desirable in specified cases of sufficient magnitude to continue the hearings process as a compulsory forum for pooling cost and market information among all competitors on the theory that public carriers are not entitled to closely-guarded secrets as are business firms generally. Regulation can also assist in making competition workable by providing more rate flexibility through relaxing tariff publication requirements. More liberal experimentation has obvious advantages in pointing the direction toward equilibrium adjustments. Although businesses value stability in all factor prices, rate stability bordering on rigidity is held in uncommonly high regard even where transport outlays are not of major importance. In other sectors of the economy, inflexibility is not an important criterion of price validity.

This view of price competition and the limited role of regulation suggests that public control should concentrate on upper rate limits, the historic function which it is reasonably well-equipped by experience, temperament, and technique to undertake. As previously emphasized, the real problem of the monopolistic value-of-service rates is that they will be maintained by tacit collusion, and not that they will be reduced by competition and cast a fictitious burden on segments of the shipping public.

Although adequate market insights and pursuit of the profit motive may spotlight situations where it is to the competitors' mutual advantage to let well enough alone, such rates violate the competitive equilibrium and are unjustified in a competitive pricing system. Instead of being protected, such rates should be forced down by regulation as a facet of making competition work.

The envisioned system is designed, furthermore, to maximize profits in individual markets. Although the competitive orientation differentiates it from pricing by monopolistic utilities and imposes substantial earnings limitations, the unevenness of competition, along with tacit collusion, may permit excessive returns. This possibility emphasizes the importance of the historic regulatory function of earnings control, particularly since, unlike duopoly or oligopoly markets generally, price increases are often matched. With railroads in the price leader's role, rate increases occasioned by generally rising prices are not uniform among all markets under the differential pricing system. The price followers tend to increase rates according to the same pattern and often by the same amounts to produce matched increases.

The enterprise system places substantial faith in the virtues of market-oriented prices to dictate benevolently the total output of various goods and services, the flow of investment funds into the respective industries, and the financial fortunes of individual producers. The fact that transport services are regarded as vital for the country's commerce and defense does not in itself render the basic principles inapplicable to these industries; in fact, regulatory departures from these principles weaken the system by denying the ultimate authority of the market place, a sin of which present control is eminently guilty. Successful thwarting of market forces cannot be accomplished in a half-slave and half-free system, but only by substantial extension of control. The forces of regulation are in disequilibrium and must go one way or the other. This ballot is cast for market-orientation as the approach best calculated to serve the public interest as measured by social efficiency, equity, and an optimum transport system.

GROUP OR CONFERENCE RATE-MAKING AND NATIONAL TRANSPORTATION POLICY IN THE UNITED STATES

DANIEL MARX, JR.*

Common carriers by rail, road, water, and air in the United States generally determine their rates, fares, classification ratings, and other charges and regulations by group consideration of these matters. Such rate-making conferences, bureaus, associations, or committees have had a long history among rail and ocean common carriers which predates their regulation by the federal government; but regulation is claimed to have stimulated, if not actually required, such group action on the part of the newer modes of transport and to have provided additional justification for cooperative action on the part of the older agencies.[1] Whether the earliest conferences were designed to avoid cut-throat competition or for monopolistic exploitation need not concern us here. A contemporary valuation must be made in the context of current performance and institutions.

The controversy regarding group rate-making has been heated, and, as one writer observed, "the discussion of these differences is not carried on in a friendly atmosphere of academic debate."[2] The caloric nature of the dispute may be explained by the fact that there is a great deal at stake in terms of both money and basic politicoeconomic philosophy. As in the case of martinis, tastes in political economy differ markedly; and whereas some prefer (at least for others) the stimulation of straight competition with only a dash, if any, of regulation, others prefer more regulation (especially if they can regulate themselves, or be regulated by those sympathetic to them, or are convinced that the alternatives would be disastrous). The declaration of national transportation policy contained in the Transportation Act of 1940[3] does not settle the controversy, but in conjunction with the balance of the Act suggests, at least to this writer, that Congress favors a pragmatic rather than doctrinaire approach to the problem of competition and monopoly in the industry.[4]

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[1] Board of Investigation and Research, *Report on Rate-Making and Rate-Publishing Procedures of Railroad, Motor and Water Carriers*, H.R. Doc. No. 363, 78th Cong., 1st Sess. 1-42 (1943).

[2] Daggett, *Railroad Traffic Associations and Antitrust Legislation*, 38 AM. ECON. REV. PROC. 459 (1948).

[3] 54 Stat. 899, as amended, 49 U.S.C. § 1 (1952).

[4] This does not deny the charge, especially applicable to competition between and among the various modes of transport, that the ambivalence of the promotional and the regulatory aspects of the trans-

This paper will present a brief historical survey of group rate-making and the attendant controversy, and then discuss some salient economic characteristics and regulatory features of the different agencies of transport, with the intention of shedding some illumination on the basic problem and on some related current issues. To reduce the scope to manageable proportions, our attention will be restricted to common carriers of domestic freight by road and rail, of foreign cargo by ship, and of domestic and foreign passenger traffic by air. For the sake of brevity, group tariff-making agencies will often be referred to as "conferences," whether or not they are officially known as bureaus, associations, or by some other name.

Although it is beyond the scope of this article to describe the organization and operation of rate conferences, the details of which differ within each branch of the industry and even more among the various modes of transport, a few general comments may assist the reader unfamiliar with them. Such conferences are generally organized on a territorial or trade-route basis. They provide for the joint consideration of proposals for new rates and changes in existing rates and related matters, and are generally responsible for publishing and filing the applicable charges.

They have evolved their own rules governing the handling of proposals for rate changes, but they generally provide for proposals to be promptly docketed; and the rail and motor bureaus at least provide for hearings and notification of interested parties. Voting requirements vary from a simple majority in some conferences to unanimity in others. The right of independent action by one or more member lines is required by law for domestic rail, road, and water carriers, and is sought by the regulatory agency for air transport.[5] The larger conferences often carry on their functions through various committees and are themselves apt to be linked together to provide for interterritory charges. It has been claimed that overall coordination, some allege monopoly control, is provided by the Association of American Railroads for railroads, by the American Trucking Association for road transport, and by the Air Transport Association of America for aviation.[6] The cost of the conferences is borne by the member carriers.

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portation policy of the United States makes it manifestly unreasonable to expect a regulatory agency "to administer with uniform impartiality and integrity congressional policies which are inherently contradictory and irreconcilable." CHARLES L. DEARING & WILFRED OWEN, NATIONAL TRANSPORTATION POLICY 367 (1949). Note also ERNEST W. WILLIAMS, JR., THE REGULATION OF RAIL-MOTOR RATE COMPETITION 15 (1958).

[5] 62 Stat. 472 (1948), 49 U.S.C. § 5b(6) (1952); I.A.T.A. Traffic Conference Resolution, 6 C.A.B. 639, 645 (1946).

[6] For a description of domestic rail, road, and water conferences, see Board of Investigation and Research, *supra* note 1, and *Hearings Before the Senate Committee on Interstate Commerce, on S. 942, to Amend the ICC to Provide for Agreements Between Common Carriers by Railroad, etc.*, 78th Cong., 1st Sess. (1943). Since 1949, almost every volume of I.C.C. reports contains information concerning rate bureaus as well as the Commission's attitude concerning their practices. For air transport conferences, see Antitrust Subcomm. of the House Comm. on the Judiciary, *The Airlines Industry*, H.R. REP. No. 1328, 85th Cong., 2d Sess. (1958). For ocean shipping conferences, see DANIEL MARX, JR., INTERNATIONAL SHIPPING CARTELS (1953). For allegations of monopoly control, see ARNE WIPRUD, JUSTICE IN TRANSPORTATION (1945); JOHN G. SHOTT, THE RAILROAD MONOPOLY (1950); Antitrust Subcomm. of the House Comm. on the Judiciary, *supra*.

I

A BRIEF HISTORICAL NOTE

The futility of destructive rate wars helped convince highly individualistic and fiercely competitive common carriers by rail and water of the advantages of cooperative action, with the result that rail freight rate bureaus and shipping conferences became increasingly common during the third quarter of the nineteenth century.[7] Although the Interstate Commerce Act of 1887 prohibited pooling, which had been an integral part of early railroad rate bureau operations, the carriers felt that the cooperation necessary for compliance with the Act's proscription of prejudicial and discriminatory rates provided added justification for group action.[8]

The Department of Justice, however, did not share the carriers' views and instituted an antitrust prosecution against the Trans-Missouri Freight Association. Then, as now, clear delineation of the applicability of antitrust legislation to regulated industries was lacking, but in 1897, the Supreme Court, in a five-to-four decision held the articles of agreement governing this rate bureau to be in unlawful restraint of trade.[9] The majority decision rejected the minority opinion that the prohibitions of the Sherman Act applied only to unreasonable restraints;[10] and in the following year, the majority position was reaffirmed in *United States v. Joint Traffic Association*.[11]

Despite these decrees, railroad conferences continued to flourish and achieved their objectives with apparent legality through voluntary action and by avoiding the threat of formal sanctions. The railroads contended, and the Interstate Commerce Commission agreed, that the intricate task of rate-making would be seriously impaired without conferences.[12] In 1921, in response to charges of abuse, the United States Senate directed the ICC to investigate the Trans-Continental Freight Bureau. After a comprehensive investigation, the Commission reported the bureau was performing many useful functions and did not violate the Interstate Commerce Act.[13] Neither the Senate nor the Commission inquired into the status of such associations under the antitrust laws, and the Department of Justice did not press the antitrust charges for approximately forty years.[14]

During this period, shipping conferences were investigated by both the British and United States Governments. A majority of the Royal Commission on Shipping Rings maintained that unrestricted competition in liner shipping was impossible, that

[7] WILLIAM Z. RIPLEY, RAILROADS—RATES AND REGULATION 21 *et seq.*, 431 *et seq.* (1912); MARX, *op. cit. supra* note 6, at 45 *et seq.*

[8] 24 Stat. 380, 49 U.S.C. § 5(1) (1952); Board of Investigation and Research, *supra* note 1.

[9] United States v. Trans-Missouri Freight Association, 166 U.S. 290 (1897).

[10] For the triumph of the "rule of reason," see Standard Oil Co. v. United States, 221 U.S. 1, 60 (1911); United States v. American Tobacco Co., 221 U.S. 106, 180 (1911).

[11] 171 U.S. 595 (1898).

[12] 12 ICC ANN. REP. 15-16 (1898).

[13] *In re* Trans-Continental Rate Bureau, 77 I.C.C. 252 (1923).

[14] It has been suggested that United States v. Trenton Potteries Co., 273 U.S. 392 (1927), and especially its reaffirmation in United States v. Socony Vacuum Oil Co., 310 U.S. 150 (1940), and Ethyl Gas Corp. v. United States, 309 U.S. 436 (1940), cast new doubt on the legality of railroad conferences. Note, *Railroad Rate Bureaus and the Anti-Trust Laws*, 46 COLUM. L. REV. 990, 994-95 (1946).

the stabilizing advantages of the conference were considerable, and that actual and potential competition and the countervailing power of shippers would usually check the abuses of excessive power. The minority view was that the majority both exaggerated the alleged advantages of the conference system and neglected to consider the interests of producers and consumers. Both groups, however, were willing to permit the continued existence of shipping conferences, and neither favored novel and drastic legislation.[15]

A committee of the United States House of Representatives (the Alexander Committee) observed that the prohibition of agreements between shipping lines to regulate competition would lead to cut-throat practices and that any large-scale disturbance of the shipping industry would be detrimental to American commerce. The Alexander Committee deplored the deferred rebate system, which had been tolerated by the British Commission, and proposed legislation to provide for government regulation of shipping.[16] Most of their recommendations were incorporated in the Shipping Act of 1916.[17] The validity of shipping conferences has not been seriously challenged in either of these countries since those investigations, although some practices, especially the use of the dual rate system in United States commerce, has been vigorously disputed, as we shall note in more detail subsequently.[18]

In 1941, the Department of Justice again became critical of railroad rate bureaus and prepared to submit indictments against them to a grand jury, but action was postponed because of the war.[19] However, in mid-1944, Georgia filed suit against some twenty railroads, alleging that they had employed rate conferences to set rates which discriminated against shippers in that state.[20] In the same year, the Department of Justice brought suit against the Association of American Railroads, the Western Association of Railroads, the Western Association of Railway Executives, certain bankers, and a long list of so-called "co-conspirators" which included railroads in the southern and eastern states.[21] The latter complaint charged the defendants with combining in restraint of trade and with attempting to monopolize.

These challenges to the legality of railroad rate conferences produced legislation to exempt them from the antitrust laws, but only after several years, volumes of vituperation, and despite a veto by President Truman.[22] The Reed-Bulwinkle Act of

[15] Royal Commission on Shipping Rings, *Report*, CMD. Nos. 4668, 4669, 4670, 4685 (1909). For a summary, see MARX, *op. cit. supra* note 6, ch. 4.

[16] House Comm. on the Merchant Marine and Fisheries, *Report on Steamship Agreements and Affiliations in the American Foreign and Domestic Trade*, H.R. Doc. No. 805, 63d Cong., 2d Sess. (1914). For a summary see MARX, *op. cit. supra* note 6, ch. 4.

[17] 39 Stat. 728, 46 U.S.C. §§ 801-42 (1952). [18] *Infra* pt. v.

[19] Daggett, *supra* note 2, at 455-56; Note, *Railroad Rate Bureaus and the Anti-trust Laws*, 46 COLUM. L. REV. 990, 995-96 (1946).

[20] Georgia v. Pennsylvania R.R., 324 U.S. 439 (1945).

[21] United States v. Ass'n of American Railroads, 4 F.R.D. 510 (D. Neb. 1945).

[22] The following excerpts from President Truman's veto message contain the burden of the less strident arguments against the Reed-Bulwinkle Act: "My disapproval of this bill does not signify opposition to carrier associations as such, or to all of their present functions. Many of their activities are useful and desirable. However, this legislation is not necessary for the continuation of such activities.

"No legislation giving a major industry immunity from the antitrust laws should be enacted unless

1948 added section 5a to the Interstate Commerce Act and thereby explicitly relieved from the operation of the antitrust laws rate conferences for domestic common carriers if their rules, regulations, and procedures were approved by the ICC, and then only if they met the general objectives of the national transportation policy.[23] The Act specifically requires that conferences recognize the right of individual carriers to take independent action in making rates if they do not wish to follow the recommendations of the bureaus and that agreements between or among carriers of different classes (modes) be limited to transportation under joint rates or over through routes.

Opponents of this legislation claimed that free competition among railroads would lead to lower rates and more efficient service and that such competition was essential to protect the public interest. They asserted that traffic conferences restrained competition and that ICC regulations were not and could not be counted on to protect the public when competition is removed. Supporters of section 5a argued that these conferences did not restrain competition, that a sanctioned plan for them has technical advantages, and that ICC regulation is entirely adequate to safeguard the public interest.[24]

Conference rate-making by road and airline common carriers is historically more directly associated with the introduction of regulatory legislation than it was for rail carriers and shipping lines. Such arrangements might have evolved in air transport without regulation for reasons similar to those that prevailed in the rail and shipping industries, but the fragmentation of the motor-carrier industry into numerous units, many of them small, might have prevented such cooperation. The role of conferences in the aviation industry has recently been examined and criticized by a subcommittee of the House of Representatives.[25]

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adequate alternative safeguards are provided for the public interest. This measure fails to provide such safeguards. . . .

"Even though transportation rates are subject to regulation by the Interstate Commerce Commission, the public interest nevertheless demands that the general national policy of maintaining competition continue to be applied to this industry." 94 CONG. REC. 8524 (1948).

[23] 62 Stat. 472, 49 U.S.C. § 5b (1952). Neither the Reed-Bulwinkle Act nor the Interstate Commerce Act applies to carriers by air. Air transport is covered by the Civil Aeronautics Act, § 412 of which permits conference rate-making. 52 Stat. 1004 (1938), 49 U.S.C. § 492 (1952); *cf.* 72 Stat. 770, 49 U.S.C.A. § 1382 (Supp. 1958). Shipping in United States foreign trade is subject to the Shipping Act of 1916, § 15 of which permits rate conferences. 39 Stat. 733, 46 U.S.C. § 814 (1952).

[24] For vigorous statements of views in opposition to the Reed-Bulwinkle Act, see WIPRUD, *op. cit. supra* note 6; SHOTT, *op. cit. supra* note 6. For a defense of the Act, see CHARLES D. DRAYTON, TRANSPORTATION UNDER TWO MASTERS (1946). These three works draw heavily on testimony presented at congressional hearings. Of special interest are the views of the Department of Justice in opposition to the legislation, and of the ICC and Coordinator of Transportation in support. It is not without significance that shippers generally testified in favor of rate conferences. This is probably attributable to their greater interest in rate stability than in the rate level. Stable rates help shippers in calculating costs to set contract prices, facilitate forward trading, and remove the danger that competitors will obtain the advantage of lower rates on later shipments. See House Comm. on the Merchant Marine and Fisheries, *supra* note 16; *Hearings Before the Senate Committee on Interstate Commerce on S. 942, to Amend the ICC to Provide for Agreements Between Common Carriers by Railroad*, etc., 78th Cong., 1st Sess. (1943).

[25] The activities of Air Transport Association of America in curbing domestic competition and the cartel activities of the International Air Transport Associaition (IATA) are commented on. Antitrust Subcomm. of the House Comm. on the Judiciary, *supra* note 6.

II

SOME SALIENT ECONOMIC CHARACTERISTICS

Common carriers by rail, water, and air have several economic characteristics in common, although in varying degree. Each of these characteristics by itself is not unique to transport, but the combination helps to explain the prevalence of conference rate-making in the transportation industries. First, as common carriers, they have a public utility status. Secondly, because of either internal economies of scale, external economies of scale, joint costs, unused capacity, or some combination of these, sizable elements of cost, known as supplementary costs, cannot be identified with any particular traffic movement and, consequently, must be arbitrarily allocated.[26] Of these, unused capacity on one, several, or all legs of a round-trip is usually the strongest cause of sizable supplementary costs per unit of service.[27] Thirdly, they sell their product—transportation service—to disparate groups of buyers, most of whom are knowledgable professionals, with widely varying elasticities of demand.[28] The professionalism of buyers of transport service, however, does not assure that the benefits of lower freight charges will always be shared with either consumers or suppliers. The incidence of freight rates, like that of taxes, depends on the degree of competition and elasticities of demand and supply in the product and factor markets. It is not without significance that shippers are often more interested in the stability of rates, and the elimination of discrimination unless it favors them, than they are in the rate level. Of course, if the rate level impedes the volume of traffic, shippers are concerned; but so are the carriers, unless they believe it is more remunerative to carry a smaller volume at the higher rate.

[26] In the case of railroads, expensive roadbeds and depots contribute initially to high fixed (supplementary) costs, although over a long period, many of these expenses become variable and the relative importance of variable costs tends to rise as traffic density increases. Since traffic density is, in part, dependent on rates, an element of indeterminacy emerges if rates are, in turn, based on costs. Shipping and airlines, like railroads, have certain overhead management costs; but unlike the rails, they have no investment in expensive rights of way and generally they do not own their own terminals. High supplementary costs are attributable to large fixed investment in expensive and large units of transport, and though these units, unlike a railroad's right of way, can be transferred from one route to another, the commitment to a previously advertised schedule and the dependence of goodwill on regular and frequent service often causes a ship or plane to depart with unused capacity.

[27] True joint costs are most apt to arise in transportation when a service is fully utilized in one direction but not in the opposite direction. In short, there is unused capacity in one direction, and, consequently, this may be considered, for present purposes, a limited case of unused capacity.

[28] The demand for the various modes of common-carrier transport is not only affected by the large variety of goods to be moved, but is also importantly influenced by the substitutability of other transportation as well as by the competition of alternate markets and routings. In addition to intracarrier competition, which is experienced by all forms of common carriage—except in those instances where no feasible alternative exists—there is often considerable price competition between the different modes of transport. Railroads are subject, in varying degree, to competition from all other forms of transport—*e.g.*, ships and barges, pipelines, planes, and trucks, whether common, contract, or private carriers. Cargo liners may be confronted with tramp and nonconference berth competition. Passenger airlines often compete with passenger vessels and chartered planes. The extent and intensity of such competition, which varies from route to route and from commodity to commodity, must be borne in mind, along with the degree and efficacy of regulation to which it is subject, in an evaluation of the monopoly power of each rate-making conference.

The second characteristic—arbitrarily allocable costs—leads in many cases to cut-throat pricing. When the ratio of supplementary costs to variable costs is high and an expansion of operations, which will permit a firm's fixed plant to be used more efficiently, is possible, then a situation conducive to cut-throat competition is present. Cut-throat pricing may lead to a suitable reduction of the excess capacity, but when resources are long-lived and not very mobile, it is more apt to lead to outright cooperation in restraint of trade or to a live-and-let-live policy under price leadership. Under each alternative, price competition is submerged and a monopolistic type of situation arises. The monopolistic character of the latter two alternatives, and the attendant ability to impose a level of rates that may produce monopoly profits, is obvious, although the price leadership variety may be less permanent and is apt to be less exploitative than formal cooperation without adequate regulation.

The elimination of excess capacity, however, would not usually be a sufficient condition to assure workable competition, because with or without excess capacity, the number of independent concerns would rarely be large enough. The inevitable result is a monopoloid situation which, in the case of multiple-product firms or firms confronted with some demands relatively more inelastic than others, will lead to price discrimination, if it did not already exist in some degree.[20] This means that some buyers pay more than their proportionate share of arbitrarily allocable costs, whereas others pay less. Taken by itself, this may or may not be economically sound, the result depending on the operation of the venture as a whole. For example, any shipment that pays more than its prime (out-of-pocket) costs makes a contribution to the venture. Whether other shipments should pay more than the sum of their prime costs plus their proportionate share of supplementary costs depends on whether there is excess and relatively immobile capacity and on whether the unused capacity is chronic, or of a seasonal or cyclical type, or due to anticipated growth. If chronic, the replacement of all the facilities need not be provided for, and

[20] Price discrimination, as noted below, is apt to be the rule rather than the exception in industrial pricing. The distinctive features of transport are its public-utility character and the difficulty of reaching general agreement on whether price discrimination is associated with multiproduct production and the ease of separating markets, as it clearly is in the case of passengers and goods transport, or only with the carrier's ability to separate the product (service), as when different rates are charged for transporting similar, but not identical, products between the same two points.

Professor Clemens demonstrates "that price discrimination and multiple product production are not exceptions to general practice, but are rather the essence of customary action. The distinction between a producer selling a single product at different prices and one selling different products in varying markets at differing percentages of profit is a distinction of degree only. What a firm has to sell is not a product, but rather its capacity to produce. Insofar as firms are motivated by the marginal principle, there is a tendency to push production towards the point where marginal cost is equal to demand price for the least profitable unit produced. In this manner 'capacity' operation is achieved. The limits to the process are institutional rather than theoretical. Under conditions of monopolistic competition this probably results in a situation where only normal profits are obtained. Whatever the amount of profit, it is obtained only by constant manipulation of the price and product line. The theory of price discrimination must be viewed as the heart of price-cost theory rather than a peripheral case. The firm that does not discriminate in its pricing policy, or differentiate in its product line, or invade new markets, dies in the competitive struggle—and 'business management does not commit suicide.'" Eli W. Clemens, *Price Discrimination and the Multiple Product Firm*, in AMERICAN ECONOMIC ASS'N, READINGS IN INDUSTRIAL ORGANIZATION AND PUBLIC POLICY 262, 276 (1958).

rates in excess of prime and proportionate supplementary costs are not justified; but in the other instances of excess capacity, they may be justifiable. Appropriate policy, consequently, will depend on the circumstances.

As long as such price discrimination means "cheap" rates for such different commodities as iron ore or wheat and "dear" rates for television sets, ladies millinery, or jewelry, there may be no great harm in some discrimination against television sets and in favor of coal. But if the discrimination is against one coal shipper because he does not have the choice of water or rail transport, or against a television shipper who does not have a road or rail option, and in favor of coal and television shippers, respectively, who are not limited to one means of transport, then the public-utility characteristic cries out against such treatment and regulation has generally been favored. Whether or not regulation in this country is and can be adequate to protect the public against undue discrimination and against the exploitative power of monopoloid situations without the application of antitrust legislation to the transport industries remains a matter of controversy, as does the proper role of competition between the various modes of transport.

Common motor carriers have been omitted from the foregoing analysis for two reasons. First, their supplementary costs are relatively small in consequence of the smallness of the units of transport and because they use public thoroughfares. Secondly, and because of the same characteristics, actual and potential competition from private and contract carriers as well as from other common carriers is greater, and effectively limits the ability to discriminate. Competition in trucking can reasonably be expected to produce workable results within the trucking industry on routes of sufficiently heavy traffic.[30] Cut-throat competition, when it has occurred, has generally been attributed to the fragmentation of the industry and the willingness of many small truckers to operate below their full costs, and the folly of newcomers willing to replace those who failed.[31] (However, in trucking, as in all forms of transport, it may be remunerative to haul freight at less than fully allocated costs in one direction in those joint-cost situations when the volume of traffic outbound and inbound is not well-balanced.) It is not astonishing, therefore, that group rate-making among motor carriers has developed largely in conjunction with the uniformity required by regulation. Before returning to a consideration of rail transport, it should be noted that lawful rate discrimination practiced by railroads enabled un-

[30] Some economists have concluded that the cost characteristics of air and water transport, with their use of free rights of way and the mobility of their craft, resemble motor rather than rail transport, and that regulation of entry and even of rates for them, predicated on lumpiness over large stretches of their cost functions, is based on a false analogy. Most recognize, however, the public-utility aspect of common carriers by air and water and the importance to the public of regular and frequent service. Whether or not an uncontrolled entry will result in undesirable irregularity of service or in cut-throat pricing remains in dispute. *Compare* LUCILE SHEPPARD KEYES, FEDERAL CONTROL OF ENTRY INTO AIR TRANSPORTATION 91-97 (1951); CLAUDE E. PUFFER, AIR TRANSPORTATION ch. 2, at 246-55 (1941); Dewey, *The Transportation Act of 1940*, 31 AM. ECON. REV. 15, 18-21 (1941); Nelson, *New Concepts in Transportation Regulation*, in NATIONAL RESOURCES PLANNING BOARD, TRANSPORTATION AND NATIONAL POLICY 197 (1942); *with* D. PHILIP LOCKLIN, ECONOMICS OF TRANSPORTATION 779-80, 857-59 (1954).

[31] LOCKLIN, *op. cit. supra* note 30, at 701-02, 738-39; WILLIAMS, *op. cit. supra* note 4, at 225-26.

regulated motor carriers to go after the higher-rated commodities and leave the lower-paying goods to the rails. This "skimming of the cream" off the railroads' traffic mix does not necessarily lead to the establishment of a transportation system based on the inherent economic advantages of each mode, as stipulated by the declaration of policy in the Transportation Act of 1940.

Conference rate-making, therefore, appears to have been stimulated by the instinct of self-preservation in the rail, water, and air transport industries, which is not to deny that baser motives may also have been at work. Group action has also been necessary to establish joint rates and through routes between connecting carriers. Simplification and uniformity of commodity classification and of shipping rules and regulations are other fruits of carrier cooperation and have generally been in the public interest. These latter functions of group action have at times been attacked as unreasonably discriminatory or in unreasonable restraint of trade, but such complaints can, for the purpose of this article, be subsumed under its consideration of conference rate-making. The extent to which self-preservation justifies group rate activity can be best understood in the context of regulation applicable to the various modes of transport.

III

SOME SALIENT REGULATORY FEATURES

The regulatory features most germane to this article are mainly those statutes relating to rates, entries, abandonments, and to the supervision of conference agreements. The efficacy with which these provisions are administered is also of relevance, but such an evaluation would enlarge this review well beyond the available limits of time and space.

Since 1940, all common carriers by rail, road, and water between interstate mainland United States points have been under the jurisdiction of the ICC, which has the authority to set maximum, minimum, or actual rates for common carriers and minimum rates for contract carriers.[32] A roughly similar "rule of rate-making" that recognizes the public interest in adequate, efficient transportation at the lowest cost consistent with the furnishing of such service by each form is applicable to all modes of transport.[33] Consequently, the ICC has the authority to prevent undue discrimination, to moderate rate competition within and between the various modes of surface transport, and to prevent an unreasonably high level of rates when the remaining elements of competition are not adequate. Commission approval is re-

[32] The Motor Carrier Act of 1935, enacted as pt. II of the Interstate Commerce Act, extended federal economic regulation to the trucking industry. 49 Stat. 543, 49 U.S.C. §§ 301-27 (1952). The Transportation Act of 1940, among other things, attempted to define a national transportation policy; and as pt. III of the Interstate Commerce Act, it transferred the regulation of interstate water carriers from the Maritime Commission to the ICC and expanded control over such carriers. 54 Stat. 929, 49 U.S.C. §§ 901-23 (1952).

[33] 54 Stat. 912 (1940), 49 U.S.C. § 15a (1952); 54 Stat. 924 (1940), 49 U.S.C. § 316(i) (1952); 54 Stat. 937 (1940), 49 U.S.C. § 907(f) (1952); 52 Stat. 1019 (1938), 49 U.S.C. § 642(e) (1952). The clauses applicable to motor and air carriers also stipulate that the inherent advantages of these forms of transport be considered.

quired for consolidations and unifications of common and contract surface carriers. Furthermore, the ICC has control of entrance through the requirement of certificates of public convenience and necessity for common carriers and permits for contract carriers; and for railroads only, the Commission has control over abandonments. However, the exemption from economic regulation of private road and water carriers, of motor carriers carrying agricultural products, of bulk carriers by water, and the limited authority over contract road and water transport not only limits the ability of the ICC to control domestic surface transport, but also modifies the need for regulation by allowing for a substantial element of actual or potential competition from unregulated or partially regulated transportation. The Civil Aeronautics Board has similar authority, including the power to prohibit abandonment, over common carrier air transport within the United States.[34] Contract carriers by air are not regulated, and the CAB is empowered to exempt carriers from regulation.

In the nation's foreign trade, the Federal Maritime Board and the CAB have the responsibility of regulating shipping and aviation, respectively, but neither is authorized by specific regulation to establish minimum or maximum rates.[35] The FMB has no statutory control over entrances and abandonments, but the CAB is authorized to require American flag planes to obtain certificates, and foreign-flag planes to obtain permits, in order to engage in the foreign air transportation of the United States.[36] Holders of certificates may not abandon a service without the CAB's sanction. Treaties of friendship, commerce, and navigation grant the shipping of almost all nations of the Free World unlimited access to American ports, but the bilateral agreements that cover commercial air transport provide for negotiated control over the volume of such traffic.[37]

As previously indicated, shipping conferences were brought under regulation by section fifteen of the Shipping Act of 1916.[38] A similar pattern was followed under section 412 of the Civil Aeronautics Act of 1938.[39] The Reed-Bulwinkle Act of 1948, by adding section 5a to the Interstate Commerce Act, provided for ICC regulation of conferences formed by domestic common carriers by rail, road, or water.[40] Section fifteen requires that all agreements, understandings, conferences, or other arrangements between parties subject to the Shipping Act which affect competition in any way must be filed with the FMB. The Board may disapprove, cancel, or modify any such agreement or modification thereof deemed to operate to the detriment of United States commerce, to be in violation of the Act, or to be "unjustly

[34] 52 Stat. 987 (1938), 49 U.S.C. §§ 481-96 (1952).

[35] Only through their ability to withdraw the approval which exempts conference agreements from antitrust legislation can the FMB and CAB attempt to control unreasonably high rates. For shipping, see MARX, *op. cit. supra* note 6, at 114-15; for aviation see Bebchick, *The International Air Transport Association and the Civil Aeronautics Board*, 25 J. AIR L. & COM. 8, 11-12 (1958).

[36] All matters decided by the CAB relative to such certificates and permits are required to be submitted to the President for approval. 52 Stat. 1014 (1938), 49 U.S.C. § 601 (1952).

[37] JOHN C. COOPER, THE RIGHT TO FLY 127-28 (1947); Sorenson, *Law of the Sea*, 520 INT'L CONCILIATION 195 (1958); Antitrust Subcomm. of the House Comm. on the Judiciary, *supra* note 6, at 33-34.

[38] 39 Stat. 733, 46 U.S.C. § 814 (1952).

[39] 52 Stat. 1004, 49 U.S.C. § 492 (1952).

[40] *Cf.* note 23 *supra*.

discriminatory or unfair" between carriers, shippers, exporters, importers, or ports, or between exporters from the United States and their foreign competitors. Approved agreements are exempted from the antitrust laws. Sections 412-14 of the Civil Aeronautics Act of 1938 similarly provide exemption from antitrust legislation to air carriers when their agreements have been approved by the CAB;[41] and, as previously indicated, section 5a provides analogous relief for domestic surface transportation when the ICC has approved the agreement.

IV

SOME GENERAL OBSERVATIONS

What are the evils attributed to conferences? They are essentially the evils of monopoly—that excessive profits are earned by charging a higher price than that which would prevail under pure competition through the monopolistic ability to restrict the volume of service below the competitive norm. Furthermore, price discrimination is made possible; but since some price discrimination can be in the public interest and unreasonable discrimination by common carrier is subject to effective regulation, criticism on this count is muted. Rate regulation, however, is less effective in preventing a level of rates that is too high. Actual and potential intra and intercarrier competition can squeeze out monopoly profits by reducing the level of rates toward the competitive norm. In addition to gearing rates to the costs of the most efficient operator, competition may also stimulate useful innovations and hasten the elimination of excess capacity.[42]

But just the right amount of competition cannot be counted on. The competition may, unless regulated, become cut-throat, and the level of rates reduced below the competitive norm until a few survivors decide to live-and-let-live. Or the competition may be held in check by adoption of a live-and-let-live oligopoly policy to begin with, and rates may be retained above the competitive norm. Such oligopolistic solutions may eliminate remaining monopoly profits by attracting excess carrying capacity. The results will depend importantly on the ease of entry and withdrawal and on the transport policies of governments.

Does the conference system resemble more closely the monopoly with its excess profits achieved by curtailing output to keep prices high, or does it resemble more nearly the oligopoly with its rates above the competitive norm but probably below the monopoly level? The answer will depend largely on: (1) the right of conference members to act independently and their propensity to do so; (2) the ease of

[41] 52 Stat. 1004, 49 U.S.C. §§ 492, 494 (1952). Unapproved agreements are made expressly illegal by § 15; but § 412 contains no such provision. The FMB may approve, disapprove, or modify an agreement; while the CAB may only approve or disapprove. For other interesting differences between § 15 and § 412, see Kharasch, *Conferences of Carriers by Sea: Freedom of Rate Fixing*, 23 J. AIR L. & COM. 287, 292 (1956).

[42] *E.g.*, it has been argued, that fare competition from nonscheduled carriers was necessary to establish low-fare aircoach service in the United States and that new traffic from an untapped market was thus developed. Antitrust Subcomm. of the House Comm. on the Judiciary, *supra* note 6, at 87-94.

entry; and (3) the actual and potential competition from other carriers and market areas.

We have seen that the right of independent action is provided common carriers in the domestic services and has been sought by the CAB for international airlines. The propensity to act independently, however, cannot be provided by regulation, but protection against retaliation can be. Ease of entry depends on initial costs and the difficulties of obtaining certificates or permits when they are required. The cost of entry is highest for railroads and least for motor carriers. Except for international shipping, the regulatory agencies have some control over entries. Competition from private and contract carriers is either unregulated or partially regulated; and competition from other market areas may or may not be regulated. Competition between different modes of domestic transport is subject to regulation, but proper coordination has proven difficult.

In short, the choice is not between a conference monopoly and pure competition, but generally is between a conference oligopoly and ordinary oligopoly. In any evaluation, the benefits as well as the evils attributed to conferences should be kept in mind. Since the evils have just been reviewed, it may be appropriate to recall that the claimed benefits include the avoidance of cut-throat rate wars, rate stability, and uniformity of shipping regulations and practices. Similar advantages are attributed to some ordinary oligopolies. A general rule for making a choice is not available. In view of the difficulty of choosing between an ordinary oligopoly and a conference oligopoly, it should not be astonishing that in the case of industries with a prominent public-utility aspect, the dilemma has often been resolved by providing for the regulation of a conference oligopoly. The problem of obtaining the benefits of regulated cooperation without losing the advantages of competition thus emerges as the real problem.

We have seen that transportation rate conferences generally were formed in response either to cut-throat competition or to the uniformity required by regulatory legislation. Even in the trucking industry, where the economic characteristics are the most conducive to workable competition, "uncontrolled competition . . . showed no tendency to reach an equilibrium at a level where marginal and average costs became equal"; so that "effective rate bureaus . . . have, with the aid of the [ICC] in response to their requests, become the most important stabilizing influence in the industry."[43] It is not clear why the competition within and among the transport industries has been more aggressive and less prone to develop a live-and-let-live policy like that which characterizes many other United States industries where fewness of sellers and large supplementary costs are common. There are some indications that such a development may be occurring, but it is too early to count on it under all types of economic weather, lest, as Santayana has warned, we are among those who, having failed to remember the past, will be condemned to repeat it.

[43] WILLIAMS, *op. cit. supra* note 4, at 225-26.

Although conferences can doubtlessly be very helpful in achieving rate stability, they are not necessary for this function if the regulatory agency has, as the ICC and CAB do for domestic transport, specific rate powers and is willing to use them. Greater use of specific rate authority, however, is contrary to much recent thinking concerning transportation; and the wind seems to be blowing in the direction of greater competition and less infringement on traditional managerial responsibilities by regulatory agencies.[44]

The major question for both domestic and foreign transport, is whether conferences on balance are more harmful to the public interest than they are helpful. The answer will depend largely on one's attitudes towards the efficacy of regulation and the prospect for workable competition if conferences are abolished.

Several students of the effectiveness of the regulatory process have expressed the opinion that a specialized, independent agency, whose function is the daily supervision of a particular segment of the nation's industry, inevitably tends to become imbued with the special viewpoint of the regulated industry, to the possible exclusion or undue subordination of the public interest.[45] Despite this criticism, which is mainly applicable to the general level of rates and to competition between different modes of transport, there has been little complaint regarding the effectiveness of the ICC, CAB, and FMB in checking unreasonable discrimination.[46]

Whether a better level of rates and whether a more economical allocation of traffic among the various agencies of transport would be achieved by more competi-

[44] DEARING & OWEN, *op. cit. supra* note 4, at 371-75; PRESIDENTIAL ADVISORY COMM. ON TRANSPORT POLICY AND ORGANIZATION, REVISION OF FEDERAL TRANSPORTATION POLICY 8-14 (1955). It should also be noted that in the latter part of 1955, the CAB authorized competition in a number of major traffic markets that were formerly monopoly routes. Antitrust Subcomm. of the House Comm. on the Judiciary, *supra* note 6, at 20-21.

Two interesting studies of United States domestic transportation have recently appeared: JOHN R. MEYER, MERTON J. PECK, JOHN STENASON, & CHARLES ZWICK, THE ECONOMICS OF COMPETITION IN THE TRANSPORTATION INDUSTRIES (1959), and JAMES C. NELSON, RAILROAD TRANSPORTATION AND PUBLIC POLICY (1959). Meyer *et al.* favor heavy reliance on the forces of market competition, a substantial reduction in regulation, and the abolition of rate bureaus. These policy recommendations are made after the authors have considered statistical cost studies of their own design for railroads, accounting cost studies of other modes of transport, and the market structure of the domestic transport industries. Their study concedes, at pp. 271, 272, that "reform is most urgently needed, however, not in public policy but in the thinking of managerial and union groups involved in the transportation industry," and that "inculcating necessary new atttitudes into the thinking of managerial groups will probably be the most important single difficulty barring the achievement of the rationalized transportation system outlined here." The writer's far more tolerant attitude towards rate conferences is predicated in part on the belief that greater refinements in cost accounting than were employed by Meyer *et al.* will indicate a larger role for value of service rate-making than they admit, and in part by the conviction that "leopards" change their spots slowly, if at all.

Nelson also stresses the need for greater competitiveness on the part of the railroads, but he makes no explicit recommendation for rate bureaus. It may be inferred that his attitude toward them is unfavorable. See pp. 188, 349-50. *But cf.* pp. 370-71. The workable competition among the various modes of domestic transport advocated by Nelson might conceivably be accelerated by the abolition of rate conferences, but a careful reading of his volume can also lead one to conclude that they will remain a helpful adjunct of interagency competition for the foreseeable future.

[45] *E.g.*, Huntington, *The Marasmus of the I.C.C.: The Commission, the Railroads, and the Public Interest*, 61 YALE L. J. 467 (1952); Jaffe, *The Effective Limits of the Administrative Process: A Reevaluation*, 67 HARV. L. REV. 1105 (1954).

[46] *Cf.* DEARING & OWEN, *op. cit. supra* note 4, at 365-68.

tion remains to be seen. Cut-throat competition was the result in the past and may again be the result in the future. On the other hand, a relatively stable oligopolistic solution, similar to that in many other industries, cannot be ruled out. But it is difficult to see where this would differ greatly from the existing conference arrangements, unless one believes the regulatory agency is unable to assure approximately as much independence of action as would exist under an ordinary oligopoly.

It can be argued that regulation currently is unable to protect the public interest adequately and that, therefore, more intercarrier competition is necessary. While such an increase in competition might be in the public interest, there is no guaranty that recent developments have changed the character of the industry sufficiently to assure an improved result. Yet, in either event, with or without more competition, it does not follow that the abolition of regulated rate conferences is necessary for more socially beneficial intercarrier competition.

The situation in the foreign carrying trades differs in some respects from that in domestic transport, although the general conclusions are similar. The FMB has no regulatory control over entrances and abandonments, except indirectly in so far as subsidized American-flag operations are concerned; and although the CAB has some jurisdiction over the volume of service, its powers are attenuated by the requirements of international comity. In addition, the FMB has insisted since 1940 that conference membership be open to all common carriers evidencing the intention and ability to operate a regular service.[47] Neither the FMB nor CAB have direct control over the level of rates, although both have, in a sense, "usurped" such power through their ability to threaten to disapprove conference agreements.[48] Such threats have been employed sparingly, perhaps because the alternative of open rates would be as unwelcome as the proposed change, and perhaps because of the difficulties inherent in proscribing rates in international trade, where conflicting jurisdictions could lead to an impasse. Finally, except for active competition for passengers on some routes, the degree of competition from other modes of transport does not appear as great as it does domestically for both passengers and most commodities.

Once again, we come to the conclusion that although the result under conferences is probably not optimal, the likely alternatives promise no better. As in the case of domestic transport, the alternatives are cut-throat competition or a live-and-let-live oligopoly. It can be argued that the far weaker regulatory powers over foreign transport require a greater element of competition to protect the public interest. But there is no certainty that an oligopolistic arrangement without the conference structure will provide the public with greater protection. Furthermore, the international character of the business and the involvement of governments in much shipping and in almost all airlines recommend the conference method as a

[47] MARX, *op. cit. supra* note 6, at 122-25; American Hawaiian S.S. Co. v. Intercontinental Marine Lines, 4 F.M.B. 160 (1953); Agreement and Practices Pertaining to Limitation on Membership—Pacific Coast European Conference, 5 F.M.B. 247 (1957).

[48] *E.g.*, for shipping, see Weil v. Italian Line, 1 U.S.S.B.B. 395, 398 (1935); for aviation, Pan American World Airways *et al.*, Re Rate Matters and Traffic Matters, 18 C.A.B. 648 (1954).

useful means of compromising international differences one step removed from the governments themselves.

It may be concluded, therefore, that conferences can neither be given a completely clean bill of health, nor be condemned out of hand. The situation for each mode of transport differs, as do the conditions on different routes. The elements of actual and potential carrier and commodity competition, cost data, the ease or difficulty of entry and withdrawal, and the efficacy of regulation are among the important variables that must be appraised. In international transport, international relations must also be among the criteria. Each sector of the transport industries must be examined and evaluated in the light of its economic characteristics and of prevailing and feasible regulatory controls. And careful estimates must be made of the probable alternatives, as distinct from the optimal results promised by textbook models of competition. The benchmarks that are employed must be measured against reasonably well-defined national and international transportation policies in which strategic as well as economic considerations are incorporated. To the writer, this suggests the need for clear statements of our nation's domestic and foreign transport policies, and then for a circumstantial approach to such elements of the problem as the role of conference rate-making. A doctrinaire solution of problems with so many variables and indeterminacies would be hazardous. In the following section a discussion of a currently controversial conference practice, the dual-rate system, will provide an illustration of the circumstantial approach.

V

An Example of the Circumstantial Approach: The Dual-Rate or Exclusive-Patronage Contract System

The circumstantial approach, whereby an attempt is made to base regulations on particular circumstances, is illustrated by recent developments regarding the legality of a tying arrangement known as the dual-rate or exclusive-patronage contract system that is practiced by the majority of shipping conferences.[49] The legality and economic necessity of shipping conferences has not been directly challenged, but their practice of charging shippers who do not sign an exclusive-patronage contract a higher rate for a given commodity carried on a given route than is charged

[49] In March 1959, there were, according to the Department of Justice, 113 shipping conferences in the foreign trades of the United States, sixty-three of which employed the dual-rate system. N. Y. Times, March 12, 1959, p. 59, col. 6. The terms of these contracts vary for different conferences, depending on the particular requirements of the trade. The contract employed by the North Atlantic Continental Freight Conference, approved by the FMB in January 1954, is fairly representative. It provided that signatory shippers will forward by vessels of conference carriers all commodities, except bulk cargoes and a few specified commodities, that they may ship from United States North Atlantic ports to a specified range of northern European ports, unless conference carriers are unable to reserve space within three days after application by the shipper on a vessel sailing within fifteen days of the desired time. In return, the conference carriers agree to charge signatories a rate 10% below the rate applicable to nonsigners. The conference carriers agree not to increase contract rates in any contract period, except in accordance with certain notice provisions, to transport all commodities tendered by signatories that can be accommodated, and to maintain adequate service. The contract runs for successive six-month periods, unless either party gives sixty days prior notice of termination.

those who do sign such an agreement has been hotly contested. The attack has been spearheaded by the Isbrandtsen Company and has been supported by the Departments of Justice and Agriculture. The FMB has defended the practice, but as a result of court action, has sharpened its scrutiny of the terms of these contracts. Especial attention has been given to the need for such contracts and to whether the differential between contract and noncontract rates is arbitrary and unreasonable.[50]

The legality of the practice ultimately revolved around the intent of the Congress in drafting section fourteen of the Shipping Act of 1916, whether or not the dual-rate contract constitutes "retaliation," and the doctrine of "primary jurisdiction."[51] The majority of the Supreme Court pointed out that section fourteen, First, outlawed deferred rebates,[52] and section fourteen, Third, outlawed "resort to other discriminating or unfair methods," without qualification as to whether these methods were "unjustly discriminatory or unfair," as is the case in section fourteen, Fourth, and elsewhere in the Act.[53] The majority opinion of the Supreme Court, therefore, held that a dual-rate contract to stifle outside competition is unlawful.[54] Since it is difficult to distinguish between an offensive tactic and a defensive ploy, the shadow

[50] Isbrandtsen Co., Inc., a prominent nonconference steamship operator, brought suit in 1948 to enjoin two conferences in the North Atlantic trade from using dual-rate contracts. The litigation moved back and forth between the FMB and the courts, and although the district court declined to rule on the validity of the dual-rate system, a permanent injunction was granted against the use of the contracts on the grounds that the differential between contract and noncontract rates was arbitrarily determined and unreasonable. Isbrandtsen Co. v. United States, 96 F. Supp. 883 (S.D.N.Y. 1951). This decision was affirmed without opinion by the United States Supreme Court by an equally divided vote. A/S J. Ludwig Mowinckles Rederi v. Isbrandtsen Co., 342 U.S. 950 (1952). For a description and analysis of the legal developments in this series of litigation, see Sisk, *Federal Maritime Board Procedure and the Legality of Dual Rate Shipping Contracts*, 64 YALE L. J. 569 (1955); Sheehan, *Exclusive Patronage Contracts in International Air Transportation*, 21 J. AIR L. & COM. 159 (1954).

This decision was followed by more careful FMB scrutiny of dual-rate contracts on other routes, several of which were also directly challenged by the Isbrandtsen Co. An important series of litigation involved the Trans-Pacific Freight Conference of Japan, 4 F.M.B. 744 (1955); and another series, the Japan/Atlantic and Gulf Freight Conference, 4 F.M.B. 706 (1955). This latter series was finally resolved by the United States Supreme Court in a 6-to-3 decision which held the dual-rate contract in the latter case unlawful. FMB v. Isbrandtsen Co., 356 U.S. 481 (1958). All of the relevant Isbrandtsen litigation is summarized in *The American Shipping Industry and the Conference System*, 11 STAN. L. REV. 136, 144-48 (1958).

[51] FMB v. Isbrandtsen Co., 356 U.S. 481 (1958). For § 14, see 39 Stat. 733, 46 U.S.C. § 812 (1952). For additional comments on "primary jurisdiction," see STAFF OF SUBCOM. No. 5, HOUSE COMM. ON THE JUDICIARY, 84TH CONG., 2D SESS., JUDICIAL DOCTRINE OF PRIMARY JURISDICTION AS APPLIED IN ANTITRUST SUITS (Comm. Print 1957).

[52] The deferred rebate provides that a shipper who, during a specified period of time, fails to confine his shipments exclusively to conference carriers, loses his right to the rebate not only for goods shipped during the specified period, but on goods shipped during the previous period as well.

[53] FMB v. Isbrandtsen Co., 356 U.S. 481 (1958). For other sections of the Act modifying discriminatory rates or practices by such words as unfair, unjust, or unreasonable, see §§ 15, 16 and 17, 39 Stat. 733-34, 46 U.S.C. §§ 814, 815, and 816 (1952).

[54] FMB v. Isbrandtsen Co., 356 U.S. 481 (1958). The proposed dual-rate contract had been approved by the Japanese Fair Trade Commission, whose requirements were that: (1) the differential should not exceed 9.5%; (2) f.o.b. buyers should be free to designate the vessel to carry their goods, and the contract signer should be free to follow the buyer's designation without penalty; (3) liquidated damages may be 50% of the amount of the contract rates which the shipper would have paid on conference vessels; and (4) the contract should be terminable, on three months' notice. Contract Rates—Trans-Pacific Freight Conference of Japan, 4 F.M.B. 744 (1955); Contract Rates—Japan/Atlantic and Gulf Freight Conference, 4 F.M.B. 706 (1955).

of doubt was cast over the legality of all dual-rate contracts in United States foreign trades.[55] The minority, in upholding the legality of the practice, disagreed with the majority's interpretation of congressional intent and stressed the doctrine of "primary jurisdiction" as a means of achieving the proper distribution of the law-enforcing roles between administrative agencies and courts in the discharge of functions for which courts have neither training, experience, nor procedural freedom.[56]

The uncertain legality of a practice on which most of the liner shipping industry had relied for so many years, plus the many cogent arguments in favor of the necessity of some sort of tying arrangement to prevent rate instability inimical to the commerce of the United States[57] and to its subsidized carriers, prompted Congress to permit for two years (until June 30, 1960) the continuation of dual-rate contracts in use and approved by the FMB, unless the Board cancels or modifies such agreements.[58] This legislation will permit further study of the dual-rate contract system and allow the Congress to clarify its intentions concerning it. The litigations pursued by the Isbrandtsen Company have already brought to public attention several aspects of the system which warrant careful scrutiny. If the system is to be legalized explicitly, as the writer believes it should, Congress ought to instruct the responsible regulatory agency to supervise such matters as the reasonableness of the differential and other terms of the contract, in order to assure that a reasonable *quid* is offered for a reasonable *quo*.

One of the more perplexing problems requiring supervision is that of liquidated damages; and it is possible that they should be made illegal. Some conferences operate the dual-rate system without any provision for damages to be paid them by shippers who violate the contract to patronize conference members exclusively; but other conferences contend that without such a provision, they do not have adequate assurance of the shipper's loyalty and good faith. The Japan-Atlantic and Gulf Freight Conference contract, for example, provides that the shipper shall pay as liquidated damages fifty per cent of the amount of freight which the shipper would have paid had such shipment been made on a conference vessel. Until payment of these damages, the shipper is denied the reduced rate; and if he violates the agreement more than once in twelve months, he suffers cancellation of the agreement and the denial of another until all such damages have been paid.[59] The majority of the Court in the *Isbrandtsen* case observed that[60]

> the liquidated-damages provision bears a strong resemblance to the feature which Congress particularly objected to in the outlawed deferred-rebate system. Certainly the

[55] Senator Magnuson wrote: "This was a staggering blow to operations in this field, upsetting alike to vessel operators and to a great proportion of exporters." Magnuson, *Maritime Legislative Problems Facing the 86th Congress*, 18 FED. B. J. 350, 352 (1958).

[56] FMB v. Isbrandtsen Co., 356 U.S. 481, 500, 519 *et seq.* (1958).

[57] Rate stability facilitates long-term business plans and forward trading. Furthermore, the exclusive-patronage contract system treats large and small shippers alike, whereas preferential rates are apt to be accorded large shippers when rates are open.

[58] 72 Stat. 574 (1958), 46 U.S.C.A. § 812 (Supp. 1958).

[59] FMB v. Isbrandtsen Co., 356 U.S. 481, 494-95 (1958).

[60] *Id.* at 495.

coercive force of having to pay so large a sum of liquidated damages ties the shipper to the Conference almost as firmly as the prospect of losing the rebate.

Since provisions for such damages can be as onerous as the illegal deferred-rebate system, they should be carefully regulated if it is found necessary to allow their use. A procedure that would require shippers who have broken their contracts by patronizing an independent carrier to pay conference carriers the higher noncontract rate for a specified period of time, or on a specified tonnage, or on a specified percentage of specified shipments carried by conference members during some agreed future period would seem preferable. But such provisions should also be carefully supervised by the regulatory agency.

Tying procedures, while common in the ocean liner industry, are not unknown elsewhere[61] and have recently been proposed for other modes of United States transport. Hence, an adequate solution of this problem for shipping may have precedential value for other segments of the industry. An officer of the International Air Transport Association (IATA) has recommended the employment of exclusive-patronage contracts for international air cargo.[62] And recently, American railroads have proposed an offer of lower rates in return for a specified percentage of shipper's freight, in an attempt to regain high-rated traffic that has been lost to other modes of transport, especially motor carriers.[63]

Such "agreed rates," as they are called by railroads in Canada and the United Kingdom, differ from the exclusive-patronage system in that they do not necessarily require 100 per cent loyalty and in that they are designed to meet competition from another mode of transport rather than to eliminate intraindustry competition. It is claimed that agreed charges would, by assuring the railroads of a specified percentage of the available traffic of signers, promise a more stable flow of traffic. Without such an agreement, it is pointed out, a rate reduction may not produce more business for the railroads, since their competitors might also reduce rates and leave the rails with a lower freight tariff but with little, if any, additional traffic. The percentage arrangement, it is urged, avoids discrimination against the small shipper, whereas lower rates based on a specified volume might not. In Canada, agreed charges are negotiated through the Canadian Freight Association; and in the United States, they would presumably be worked out through the rate bureaus, so that shippers could use any rail carrier serving the area and interrail competition would be unaffected. Such a percentage arrangement might be a solution ocean conferences could employ in lieu of liquidated damages.

Once again, it becomes clear that arrangements of this kind should be scrutinized carefully by the appropriate regulatory agency, and, if found constructive and permitted, their terms must be scrupulously supervised. The circumstantial approach,

[61] *E.g.*, a loyalty discount of 2% was recently employed by the Aluminium Company of Canada on sales in the United Kingdom. The Economist, Oct. 11, 1958, p. 174. See also Turner, *The Validity of Tying Arrangements Under the Antitrust Laws*, 72 HARV. L. REV. 50 (1958); Lewis, *Notes on the Economics of Loyalty*, 9 ECONOMICA 333 (1942).

[62] Sheehan, *supra* note 50.

[63] Railway Age, Nov. 3, 1958, pp. 9-10.

as opposed to a doctrinaire program, permits flexibility and experimentation and minimizes the risks of economic chaos.

If exemptions are to be made from the antitrust laws, however, the regulatory agencies must demonstrate greater independence and be more aggressive in demanding the maximum competition consistent with the economic characteristics of the regulated industry.[64] A declaration by Congress that competitive principles should be maintained to the maximum extent practicable might be a useful addition to the relevant regulatory acts.[65]

The problem of a regulatory agency's identification with the regulated industry would probably not be entirely solved, and this suggests that provision should also be made for the Department of Justice to take action when a regulatory agency appears indifferent to the competitive requirements of the congressional declaration.[66] This will contribute a regrettable element of uncertainty and violates a strict interpretation of the doctrine of "primary jurisdiction." It is fervently hoped that greater initiative on the part of the regulatory agencies will reduce the need for this departure from the "doctrine" and will minimize the danger that their activities will become, as the minority of the United States Supreme Court eloquently warns, "this carnival of procedural emptiness," and that greater regulatory zeal will also minimize the probabilities that litigants will be forced to undergo unnecessary expense and delay in shuttling back and forth between regulatory bodies and the courts.[67] A system of checks and balances has been found useful in helping to reconcile political freedom and responsibility, however, even if it has, at times, been confusing and frustrating. A comparable system may be needed to reconcile the freedom of exemption from the antitrust laws with the economic responsibilities of regulated industries and their regulatory agencies to furnish satisfactory transportation services at rate levels close to the cost of providing them.

[64] Several reforms might improve the performance of the regulatory agencies. The writer urges: (1) a clear and complete separation of regulatory from promotional functions: (2) reorganization of the regulatory agencies to emphasize their judicial character and appointment of members of judicial temperament and calibre; and (3) placing the agencies' appropriations in an omnibus bill with other funds for the judiciary, so as to insulate them from attack by lobbyists for the regulated industries.

[65] See Antitrust Subcomm. of the House Comm. on the Judiciary, *supra* note 6, at 106, 267.

[66] A recent study of the insurance industry came to a similar conclusion. Dirlam & Stelzer, *The Insurance Industry: A Case Study in the Workability of Regulated Competition*, 107 U. PA. L. REV. 199 (1958). It should be noted, however, that for freight transportation, the regulatory agency will often be involved in adjudicating between two oligopolies, and, consequently, there is no certainty that lower transport charges will be passed on to the consuming public. Action by the Department of Justice may be a necessary condition to assure an approach to the competitive solution, but if restricted to transportation, it is not a sufficient condition to protect the ultimate consumer.

[67] FMB v. Isbrandtsen Co., 356 U.S. 481, 518 (1958).

THE ROLE OF CONFERENCES AND THE DUAL-RATE SYSTEM IN OCEAN FOREIGN TRADE*

E. Robert Seaver† and Edward Schmeltzer‡

I

The Need for Foreign Ocean Conferences

This paper is concerned primarily with conferences in ocean foreign trade, although comparisons will be made with the conferences in other fields of transportation. It should be understood at the outset that the important controversy in ocean foreign trade is not whether conferences should be allowed to exist, but whether they should be allowed to use the dual-rate system whereby shippers who contract to deal exclusively with the steamship lines of the conference are, by the terms of the contract, given a specified rate discount.

Conferences are composed of ocean common carriers serving the same trade areas who join together to fix rates or otherwise control competition in the trade. They have operated successfully since 1875,[1] and, subject to federal regulation,[2] they are specifically authorized by section fifteen of the Shipping Act of 1916 to operate in the ocean commerce of the United States.[3] The 1916 Act stemmed from lengthy investigations which the Alexander Committee,[4] a subgroup of the Merchant Marine and Fisheries Committee of the House of Representatives, conducted pursuant to resolutions of February 24, 1912, and June 18, 1912. The Alexander Committee fully

* The views expressed in this article are the personal views of the authors and not necessarily those of either the Federal Maritime Board or the Maritime Administration.

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[1] Daniel Marx, Jr., International Shipping Cartels 46 (1953).

[2] The federal agencies which have, in succession, regulated the shipping industry pursuant to the Shipping Act of 1916, 39 Stat. 728, 46 U.S.C. §§ 801 *et seq.* (1952), have been the United States Shipping Board, the United States Shipping Board Bureau of the Department of Commerce, the United States Maritime Commission, and the Federal Maritime Board [all of which are referred to hereinafter as the "shipping agency"].

[3] Shipping Act of 1916, § 15, 39 Stat. 733 (1916), 46 U.S.C. § 814 (1952), authorizes the shipping agency to approve, and thereby exempt from the antitrust laws, conference agreements "fixing or regulating transportation rates or fares; giving or receiving special rates, accommodations, or other special privileges or advantages; controlling, regulating, preventing, or destroying competition; pooling or apportioning earnings, losses, or traffic; allocating ports or restricting or otherwise regulating the number and character of sailings between ports; limiting or regulating in any way the volume or character of freight or passenger traffic to be carried; or in any manner providing for an exclusive, preferential, or cooperative working arrangement."

[4] Probably the fundamental issue before the Committee was, as stated by its chairman, Congressman Alexander, on the floor of the House: "Whether or not we should recognize the agreements existing between carriers by water or recommend that the Sherman antitrust law should be enforced against them and these combinations be broken up." 53 Cong. Rec. 8077 (1916).

probed the role of conferences in the field of ocean shipping and in its report[5] concluded:[6]

> It is the view of the Committee that open competition cannot be assured for any length of time by ordering existing agreements terminated. The entire history of steamship agreements shows that in ocean commerce there is no happy medium between war and peace when several lines engage in the same trade. Most of the numerous agreements and conference arrangements discussed in the foregoing report were the outcome of rate wars, and represent a truce between the contending lines. To terminate existing agreements would necessarily bring about one of two results; the lines would either engage in rate wars which would mean the elimination of the weak and the survival of the strong, or, to avoid a costly struggle, they would consolidate through common ownership. Neither result can be prevented by legislation, and either would mean a monopoly fully as effective, and it is believed more so, than can exist by virtue of an agreement. Moreover, steamship agreements and conferences are not confined to the lines engaging in the foreign trade of the United States. They are as universally used in the foreign trade of other countries as in our own. The merchants of these countries now enjoy the foregoing advantages of cooperative arrangements, and to restore open and cutthroat competition among the lines serving the United States would place American exporters at a disadvantage in many markets as compared with their foreign competitors.

More recently, the Senate Interstate and Foreign Commerce Committee similarly found that the conference system is valuable to the foreign commerce of the United States and important to the survival of an American merchant marine. The Committee stated:[7]

> It must be clearly recognized that the conference system has assisted in the establishment of an American merchant marine where before it had little chance of survival. Before 1914, we carried only 9.4 per cent of our foreign trade in our own ships. The rates have been set high enough to allow the American operator to at least meet his out-of-pocket costs of operation, and while the foreign operator has many advantages, not the least of which is greater profits on his operation, the fact remains that from the standpoint of national security and from the point of view of the American shipper, the conference system has paid off in stability of rates and improved quality of service.

The economic forces which underlie the tendency toward rate wars in foreign ocean shipping are no less present today than in 1916, when the Alexander Committee and Congress decided to foster the conference system in an attempt to curb rate wars and their destructive consequences. These forces may be summarized as follows:

1. There is complete freedom of entry into international shipping upon the high seas.[8] Any vessel of any flag may, with exceptions here insignificant, call at any port.

[5] The proceedings before the Committee were published in four volumes [referred to hereinafter as the Alexander Report (ALEX. REP.)], the last of which, containing a summary of the evidence and arguments and the Committee's conclusions and recommendations for legislation, is House Comm. on the Merchant Marine and Fisheries, *Steamship Agreements and Affiliations in the American Foreign and Domestic Trade*, H.R. Doc. No. 805, 63d Cong., 2d Sess. (1914).

[6] 4 ALEX. REP. 416-17.

[7] Senate Comm. on Interstate and Foreign Commerce, *Merchant Marine Study and Investigation*, S. REP. No. 2494, 81st Cong., 2d Sess. 86 (1950).

[8] See MARX, *op. cit. supra* note 1, at 279-84.

In desirable trades, this leads to overtonnaging and keen competition, with both new ships built to meet peak demands and older ships transferred from depressed trades. If the abundance of cargo is temporary, the fight for existence will be even more intense when traffic declines, especially from new lines which have come into the trade. In contrast, carriers in other fields of transportation are permitted to enter a particular service only after authorization, based usually on considerations of "public convenience and necessity," has been granted by a regulatory body.[9]

2. Because historically the seas have been free and the commerce on them international in nature, it is difficult or impossible for a single government to fix minimum rates and thereby prevent rate wars.[10] In domestic commerce, however, regulatory bodies have this power. For example, the Interstate Commerce Commission has authority to fix minimum rates "to keep in competitive balance the various types of carriers and to prevent ruinous rate wars between them."[11]

3. Characteristically, ocean liners involve capital and operating costs which are fixed and high, and which will be substantially the same whether the vessel sails full or half-full. Once committed to a voyage, the vessel is under strong compulsion to attempt to fill any empty space at any rate which exceeds the cost of loading and discharging. Where there is no effective restraint upon competition, there is likely at every port to be a fierce and destructive struggle to attract cargo by reducing rates to the level which will fill the vessel.[12]

4. Liner steamship services, also known as berth and common-carrier services, are those which operate on regular schedules between regular ports of call. Since the liner, with its tremendous capacity, must call at each port, it would often be in the interest of a liner to cut its rates at a given port, rather than to abandon the port completely to its competition or to sail empty. In contrast, a railroad can dispatch to any particular point only the number of freight cars which are necessary.

5. There are great differences in the operating and capital costs of carriers of

[9] The Transportation Act of 1920 made the initiation of new railroad service conditional upon a finding by the Interstate Commerce Commission that the new service was required for the "public convenience and necessity." 41 STAT. 477, 49 U.S.C. § 1(18) (1952). Upon enactment of regulatory authority over domestic motor and water transportation in 1935 and 1940, respectively, similar conditions were imposed upon new services in those fields of transportation. 49 Stat. 551 (1935), as amended, 49 U.S.C. § 306 (1952); 54 Stat. 941 (1940), 49 U.S.C. § 909 (1952). The Civil Aeronautics Act of 1938 made the initiation of new domestic or foreign air service conditional upon a finding of the Civil Aeronautics Board that the new service provided by citizens of the United States was required for the "public convenience and necessity" or that the new service provided by noncitizens "will be in the public interest." 52 Stat. 987, 49 U.S.C. § 481 (1952).

[10] H.R. 10500, 64th Cong., 1st Sess. (1915), proposed a direct system of governmental regulation of foreign commerce whereby conferences would not be specifically recognized and an administrative board would be established with power "to determine and prescribe just and reasonable rates or charges to be demanded or collected for the transportation of passengers and property" and to issue licenses to engage in the foreign trade of the United States. See the testimony outlining the objections to such a system of regulation, in *Hearings Before the House Committee on the Merchant Marine and Fisheries on H.R. 10500, A Bill to Establish a United States Shipping Board*, 64th Cong., 1st Sess. 516-21 (1915). The Alexander Committee already had concluded that ocean foreign commerce is not susceptible to direct rate control by any one government. 4 ALEX. REP. 309-11, 420-21.

[11] New York v. United States, 331 U.S. 284, 346 (1947).

[12] See MARX, *op. cit. supra* note 1, at 21-22.

different nationalities.[13] In an overtonnaged trade, the carriers whose costs are low can profitably attract cargo at rates which are nonremunerative to vessels of other nations. American-flag ships are particularly vulnerable in such situations because generally their operating and capital costs are considerably higher than those of the other maritime nations.[14]

6. In many trades, there is a severe imbalance between outbound and inbound traffic. The fleet necessary to carry the cargo moving in the preponderant direction[15] will tend to overtonnage the trade in the other direction.[16] This will tend to create rate instability in the overtonnaged direction.

Notwithstanding the existence of such unstabilizing forces in foreign ocean shipping, an effective conference operating under the provisions of the Shipping Act of 1916 can normally prevent the outbreak of rate wars in a trade by providing a forum in which its membership can agree to establish and abide by a single tariff of rates. When, however, a trade becomes overtonnaged and one or more strong independent lines exist, the conference lines are likely to lose their ability thus to control rates because an independent, by undercutting the conference rates by a fixed percentage, can divert substantial quantities of traffic from conference vessels.[17]

By thus filling its vessels to a greater degree, such an independent reduces its carrying cost per ton and is enabled to operate profitably, and ordinarily more profitably than the conference lines, despite its lower rates. If seriously hurt by the independent's rate-cutting, the conference lines are strongly impelled to abandon their rate structure and declare the rates "open," which means that each member is permitted to fix its own rates. The result, obviously, is that all lines in the trade are then in unrestrained competition, rate wars flourish, and low operating costs become the main index of ability to survive. These are the conditions which were condemned by the Alexander Committee as being detrimental to shippers[18] and car-

[13] Contract Rates—Japan/Atlantic and Gulf Freight Conference, 4 F.M.B. 706, 733 (1955).

[14] See U.S. DEP'T OF COMMERCE, REVIEW OF DIRECT AND INDIRECT TYPES OF MARITIME SUBSIDIES 20 (1956).

[15] In the trades to and from the United States, the outbound traffic is generally heavier. A prime example of overwhelmingly heavy outbound traffic is the U.S. Gulf/United Kingdom-Continent trade (Trade Route 21), where, in 1956, 2,830,000 long tons of commercial dry cargo moved outbound compared to 710,000 long tons inbound. (Source: Maritime Administration, Office of Statistics and Special Studies.)

[16] See Contract Rates—Trans-Pacific Freight Conference of Japan, 4 F.M.B. 744, 748 (1955).

[17] See MARX, *op. cit. supra* note 1, at 196.

[18] Shippers whose activities were studied by the Alexander Committee as well as those who have testified before the FMB in numerous hearings have indicated a need for rate stability rather than the low rates which prevail during rate wars. They testified that rate stability eliminates the undesirable speculative risk which exists under open-rate conditions; that it reduces complaints from buyers abroad; that it enables shippers and merchants to calculate laid-down costs and to arrange sales for delivery in the future; and that it permits forward trading and the building of inventories. 4 ALEX. REP. 297-98, 288, 299. See also Senate Comm. on Interstate and Foreign Commerce, *Continuing in Effect Until June 30, 1960, Dual-Rate Contract Agreements Approved Under Section 15, Shipping Act, 1916*, S. REP. No. 1709, 85th Cong., 2d Sess. 3 (1958), where the Committee stated: "If, as alleged, Conference rates are higher than need be, the benefits from the dual-rate system must be an overriding consideration, for many of the largest exporters, industries and corporations have urged upon your Committee enactment of this legislation to permit continuance of the dual-rate system. Opposition from industry to enactment is negligible by comparison."

riers[19] alike. The prevention of these conditions is the very reason the conference system was legalized under the Shipping Act of 1916.

II

NATURE AND LEGAL STATUS OF THE DUAL-RATE SYSTEM

As we have seen, the Government-regulated conference system is needed and recognized as legal in the foreign ocean commerce of the United States. We have also seen that under certain conditions, conferences cannot prevent rate wars and create stability simply by agreement on rates between themselves. Almost from their inception, conferences have utilized one means or another to tie shippers to the conference and thereby protect the conference rate structure from outside competition.[20] The principal shipper ties used in world trade, historically and today, are the deferred-rebate system and the dual-rate system, or something akin to it.

The deferred-rebate system may be described as the return of a portion of freight money contingent upon the shipper's exclusive use of conference carriers during a specified period, coupled with a specified subsequent deferment period.[21] It has been used by conferences since 1877, when it was inaugurated in the United Kingdom-Calcutta trade after the unsuccessful use of a form of contract-rate system.[22] The Royal Commission on Shipping Rings, which investigated the British shipping industry and filed its report in 1909, five years before publication of the Alexander Report, found that the deferred-rebate system was the most effective device for insuring all the advantages of the conference system and refused to recommend that it be made illegal.[23] The system, which is still widely used in trades between foreign nations, was condemned by the Alexander Committee because its deferral feature placed the shipper "under constant obligations to the conference lines,"[24] and it was specifically prohibited in section fourteen of the Shipping Act of 1916.[25] On the other hand, an exclusive-patronage-contract system similar to the dual-rate system was described in the Alexander Report, but was not explicitly prohibited by the Shipping Act.

[19] The high capital costs characteristic of ocean shipping make it necessary for carriers to realize revenues which will enable them to establish and maintain funds for the replacement of vessels. Obsolete ships cannot be replaced, and improved equipment and techniques cannot be introduced if carriers waste their assets in fighting rate wars. See 4 ALEX. REP. 497; Senate Comm. on Interstate and Foreign Commerce, *Continuing in Effect Until June 30, 1960, Dual-Rate Contract Agreements Approved Under Section 15, Shipping Act, 1916*, S. REP. No. 1709, 85th Cong., 2d Sess. 2 (1958).

[20] In addition to the use of shipper ties, conferences have attempted, at times, to control outside competition by such crude devices as the "fighting ship," which is supported by the conference to drive a competitor out of a trade, and refusal of space to shippers who have patronized outside lines. Both these devices were specifically outlawed by the Shipping Act of 1916, § 14, 39 Stat. 733, 46 U.S.C. § 812 (1952).

[21] See also the description of the deferred-rebate system. *Ibid.*

[22] See MARX, *op. cit. supra* note 1, at 47.

[23] Royal Commission on Shipping Rings, *Report*, CMD. No. 4668, at 50-52 (1909).

[24] 4 ALEX. REP. 287. The Alexander Committee pointed out that: "In this connection it is argued that the ordinary contract system does not place the shipper in the position of continual dependence that results from the deferred rebate system. *Id.* at 307.

[25] 39 Stat. 733, 46 U.S.C. § 812 (1952).

Soon after passage of the 1916 Act, conferences began using the dual-rate system in place of the prohibited deferred-rebate contracts, and the successive shipping agencies charged with administering the Act were faced with questions of whether they had authority to approve the dual-rate system and, if so, what criteria should be used for approval or disapproval. The dual-rate system was attacked before the shipping agencies and the courts as being illegal per se on two grounds.[26] First, it was contended that by its terms, the system violates section fourteen, Third, of the Shipping Act of 1916. Under the system, signatory shippers pay one rate and non-signatory shippers pay a higher rate for the same service. This has been held prima facie discriminatory.[27] In addition, the contract contains a liquidated damages provision which applies if a signatory shipper moves any of his shipments via a non-conference vessel. From this it is argued that the system is necessarily violative of section fourteen, Third, which makes unlawful any "retaliation" against shippers by resort to discriminating or unfair methods because the shipper has patronized another carrier, or for any other reason.[28]

Second, it was contended that the system is necessarily violative of the unjust discrimination provisions of sections fifteen and seventeen of the Shipping Act of 1916.[29] Although these sections appear to outlaw only *unjust* discrimination, it is argued that the judicial history of "unjust discrimination," as revealed by decisions under section two of the Interstate Commerce Act of 1887[30] and section ninety of the English Railway Clauses Consolidation Act of 1845,[31] makes unlawful as unjustly discriminatory any difference in the rates charged to shippers for carrying identical cargoes over the same line, for the same distance, and under the same circumstances of carriage, and this applies equally to the charging of different rates for moving identical goods on the same vessel between the same ports.

The Federal Maritime Board and its predecessors have generally rejected these two arguments and held that dual-rate systems are not illegal per se.[32] They have found important support for their position in the fact that the Alexander Committee described an exclusive-patronage-contract system similar to the dual-rate system, but the Committee and Congress did not undertake to outlaw it, at least by name or description, as was done with deferred rebates and other competitive devices considered unacceptable.[33]

[26] For a full review of litigation before the courts and the shipping agencies concerning approval of dual-rate systems, see Contract Rates—Japan/Atlantic and Gulf Freight Conference, 4 F.M.B. 706 (1955).

[27] See Swayne & Hoyt v. United States, 300 U.S. 297, 303 (1937).

[28] Shipping Act of 1916, § 14, Third, 39 Stat. 733, 46 U.S.C. § 812 (1952), is quoted in pertinent part in note 51 *infra*.

[29] 39 Stat. 733, 46 U.S.C. §§ 814, 816 (1952).

[30] 24 Stat. 379, as amended, 49 U.S.C. § 1 (1952).

[31] 8 & 9 Vict. c. 20, § 90.

[32] In Eden Mining Co. v. Bluefields Fruit & S.S. Co., 1 U.S.S.B. 41 (1922), the first dual-rate case before the shipping agency, it was held that the dual-rate practice of a single line (not a conference) violated §§ 16 and 17 of the Act. Thereafter, dual-rate systems were upheld, at least in every case where they were found to conform to the criteria and safeguards discussed in the text.

[33] The FMB was convinced that the dual-rate system was in use at the time of the Alexander Committee's investigation. Contract Rates—Japan/Atlantic and Gulf Freight Conference, 4 F.M.B. 706, 729-30

In their dual-rate decisions, the courts and the shipping agencies developed criteria, as well as safeguards to independent lines and the public, which had to be met before a particular system would be approved. The basic considerations set forth by the Supreme Court in 1937, and adhered to by the shipping agencies since then, are as follows:[34]

> In determining whether the present discrimination was undue or unreasonable the [agency] was called upon to ascertain whether its effect was to exclude other carriers from the traffic, and if so, whether . . . it operated to secure stability of rates with consequent stability of service, and, so far as either effect was found to ensue, to weigh the disadvantages of the former against the advantages of the latter.

Consequently, since 1937, approval of any system has depended upon a weighing of whether it is necessary to prevent rate wars, to permit forward trading by shippers, and to assure rate stability and regularity of service, as against whether, and to what extent, it would exclude independent competition in the trade.[35]

In judging a dual-rate system, the shipping agency will not allow a greater limitation upon competition than is absolutely necessary to prevent instability of rates and service. Thus, a dual-rate system instituted by a single line which seeks to exclude from the traffic all competitors will not be approved.[36] Nor will one be approved in the domestic trades, where the shipping agency has power to control minimum and maximum rates.[37] And approval will be denied where the system is used to forbid shippers to route traffic via a port not served by the conference lines.[38] The system will not be approved unless conference membership is open to any carrier in the trade[39] upon payment of no more than a reasonable membership admission fee.[40] The differential between the contract and noncontract rates may not be arbi-

(1955). It argued to the courts that Congress was aware that dual-rate contracts existed prior to 1916, did not prohibit them, and, therefore, implicitly allowed them. See, *e.g.*, FMB v. Isbrandtsen Co., 356 U.S. 481, 493 (1958). The Board's argument was grounded principally on the following description, included in the Alexander Committee's statement of what it had found in the industry:

"3. Contracts with shippers which may be classified as:

"(a) *Joint contracts made by the conference as a whole.* Such contracts are made for the account of all the lines in the agreement, each carrying its proportion of the contract freight as tendered from time to time. The contracting lines agree to furnish steamers at regular intervals and the shipper agrees to confine all shipments to conference steamers, and to announce the quantity of cargo to be shipped in ample time to allow for the proper supply of tonnage. The rates on such contracts are less than those specified in the regular tariff, but the lines generally pursue a policy of giving the small shipper the same contract rates as the large shippers, *i.e.*, are willing at all times to contract with all shippers on the same terms." 4 ALEX. REP. 290.

[34] Swayne & Hoyt v. United States, 300 U.S. 297, 304 (1937).

[35] See, *e.g.*, Contract Rates—Trans-Pacific Freight Conference of Japan, 4 F.M.B. 744, 758-59 (1955).

[36] Eden Mining Co. v. Bluefields Fruit & S.S. Co., 1 U.S.S.B. 41 (1922).

[37] Intercoastal Investigation, 1 U.S.S.B.B. 400 (1935); Gulf-Intercoastal Contract Rates, 1 U.S.S.B.B. 524 (1936).

[38] Contract Routing Restrictions, 2 U.S.M.C. 220, 226 (1939).

[39] Phelps Bros. & Co. v. Cosulich Societa, 1 U.S.M.C. 634, 640-41 (1927).

[40] Pacific Coast-European Conference, 3 U.S.M.C. 11, 14 (1948).

trary[41] or so great as to prevent the use of nonconference lines.[42] The system cannot be used to prevent routing of traffic on independent lines by buyers who are not signatories to dual-rate contracts and who have, in fact, retained the right under their sales contracts to designate the carrier, even though the seller is a signatory to a dual-rate contract.[43] Approval will not be given if the liquidated damage provision is too severe.[44] And it will be withheld with respect to so much of a proposed dual-rate system as would have been applicable to commodities not carried by nonconference competitors.[45]

It cannot be said, however, that all the currently existing dual-rate systems meet these criteria and safeguards. For one thing, many of them have never been specifically approved by the shipping agencies because the agencies believed that their approval of the basic or organic conference agreement authorizing the fixing of lawful rates carried with it the cover of authority to change rates; and the agencies considered the inauguration of a dual-rate system to be a rate change.[46] Of course, upon complaint or its own motion, the shipping agency could review any dual-rate system and disapprove it if it failed to meet the prevailing standards.[47]

In 1954, the Court of Appeals for the District of Columbia rejected the "cover of authority" doctrine on the ground that section fifteen of the Shipping Act of 1916 required specific FMB approval as "a necessary condition precedent to initiation of [a dual-rate] agreement."[48] Because of the tremendous administrative burden and the cases then in litigation which cast doubt on its authority to approve dual-rate systems, the Board did not, subsequent to this decision, embark upon an investigation of all existing dual-rate systems.

It is also true that some of the existing dual-rate systems may not meet all of the above-specified criteria and safeguards because of changed conditions in the trade. There is no provision in the statute or in the FMB regulations for periodic review of dual-rate systems; hence, a system which was approved as necessary to prevent a rate war may no longer be necessary for that purpose.

The position that the dual-rate system is not illegal per se, but rather is approvable if found consonant with the mentioned criteria and safeguards, was first overruled by the courts forty years after passage of the 1916 Act in *Isbrandtsen Co. v. United States*.[49] There, the court reviewed the FMB's approval of a dual-rate

[41] Isbrandtsen Co. v. United States, 96 F. Supp. 883, 886 (S.D. N.Y. 1951).

[42] North Atlantic Freight Conference, 4 F.M.B. 355 (1954); Contract Rates—Japan/Atlantic and Gulf Freight Conference, 4 F.M.B. 706 (1955).

[43] Mitsui Steamship Co. v. Anglo-Canadian Shipping Co., 5 F.M.B. 74 (1956); Contract Rates—Japan/Atlantic and Gulf Freight Conference, 4 F.M.B. 706 (1955); Secretary of Agriculture v. North Atlantic Continental Freight Conference, 5 F.M.B. 20 (1956).

[44] Pacific Coast European Conference, 3 U.S.M.C. 11, 19 (1948); *cf.* Isbrandtsen Co. v. North Atlantic Freight Conference, 3 F.M.B. 235, 246 (1955).

[45] Contract Rates—Japan/Atlantic and Gulf Freight Conference, 4 F.M.B. 706 (1955).

[46] Contract Rates North Atlantic Continental Freight Conference, 4 F.M.B. 98, 104-05 (1952); Section 15 Inquiry, 1 U.S.S.B. 121, 125 (1927).

[47] Contract Routing Restrictions, 2 U.S.M.C. 220 (1939).

[48] Isbrandtsen Co. v. United States, 211 F.2d 51, 57 (D.C. Cir. 1954); see also River Plate and Brazil Conferences v. Pressed Steel Car Co., 227 F.2d 60 (2d Cir. 1955).

[49] 239 F.2d 933 (D.C. Cir. 1956).

system in the Japan/Atlantic and Gulf inbound trade[50] and held that the Board was without power to approve *any* dual-rate system, since the system by its terms constituted retaliation by a discriminatory method in violation of section fourteen, Third, of the Act.[51]

The Supreme Court granted certiorari and affirmed the decision of the court of appeals.[52] Although the Supreme Court rested its decision entirely upon section fourteen, Third, it is not clear whether it held that this section prohibits *all* dual-rate systems or only those which the FMB finds "are employed as predatory devices" having the intent and effect of stifling nonconference competition. The following, we believe, is its central holding in the case:[53]

> Congress was unwilling to tolerate methods involving ties between conferences and shippers designed to stifle independent carrier competition. Thus Congress struck the balance by allowing conference arrangements passing muster under §§ 15, 16, and 17 limiting competition among the conference members while flatly outlawing conference practices designed to destroy the competition of independent carriers. Ties to shippers not designed to have the effect of stifling outside competition are not made unlawful. Whether a particular tie is designed to have the effect of stifling outside competition is a question for the Board in the first instance to determine.
>
> Since the Board found that the dual-rate contract of the Conference was "a necessary competitive measure to offset the effect of nonconference competition" required "to meet the competition of Isbrandtsen in order to obtain for its members a greater participation in the cargo moving in this trade," it follows that the contract was a "resort to other discriminating or unfair methods" to stifle outside competition in violation of § 14 Third.

It is significant that in a footnote to the second quoted paragraph, the Court undertook to support its rejection of the system in question by pointing out that "the Board estimated that Isbrandtsen would lose approximately two-thirds of its 1952 volume." Further, in discussing the argument that a decision along the lines it adopted would be inconsistent with the decisions in two previous Supreme Court cases which were were dismissed not on the ground that the system was unlawful, but because primary jurisdiction to determine the validity of a dual-rate system rested with the shipping agency, the Court stated:[54]

> Since, as we hold, § 14 Third strikes down dual-rate systems only where they are employed as predatory devices, then precise findings by the Board as to a particular system's intent and effect would become essential to a judicial determination of the system's validity under the statute.

Thus, the Supreme Court left unanswered the question of whether the Court would strike down a system which is purely defensive in design and has the purpose

[50] See Contract Rates—Japan/Atlantic and Gulf Freight Conference, 4 F.M.B. 706 (1955).

[51] Shipping Act of 1916, § 14, Third, 39 Stat. 733, 46 U.S.C. § 812 (1952), provides in pertinent part: "No common carrier by water shall—

"Retaliate against any shipper by refusing, or threatening to refuse, space accommodations when such are available, or resort to other discriminating or unfair methods, because such shipper has patronized any other carrier or has filed a complaint charging unfair treatment, or for any other reason."

[52] FMB v. Isbrandtsen Co., 356 U.S. 481 (1958).

[53] *Id.* at 492-93. (Footnotes omitted.)

[54] *Id.* at 499.

and effect only of maintaining for the conference lines all or a given portion of the cargo they carried prior to the initiation of the system. The Court's emphasis on the stifling[55] effect on independent competition which must be present if the particular system is to be considered a violation of section fourteen, Third, portends that such a system will not be found to violate the section. On the other hand, Justice Frankfurter, in a dissenting opinion, joined by Justices Burton and Harlan, stated: "Of course these exclusive patronage contracts and the dual-rate systems of which they are an integral part are designed to meet nonconference competition. And there should be no mistake but that today's decision outlaws such systems."[56]

A second important question left unanswered by the Supreme Court is whether it would hold illegal the use of a contract-rate system similar to those recognized by the Alexander Committee. The Supreme Court distinguished the contracts described in the Alexander Report, on which the shipping agencies had heavily relied, from the one before it. It pointed out that the former subjected the shipper only to ordinary damages for a breach and were very much like ordinary requirement contracts in that they obligated conference members "to furnish steamers at regular intervals and at rates effective for a reasonably long period"; in the latter, however, there is no guarantee of service and rates for a reasonably long period and the shipper who commits a breach is obligated to pay liquidated damages of fifty per cent of the amount of freight which would have been paid had the shipment been made on a conference vessel.[57]

It seems probable that the conferences would provide shipper agreements with the features the Court ascribes to the contracts reported in the Alexander Report if this would remove the legal encumbrance from the use of the dual-rate system. Dual rates are vital only when a trade is overtonnaged, and in such a circumstance, it should not burden the carriers to guarantee space and rates for reasonably long periods. The contract now used by the North Atlantic Continental Freight Conference provides for a six-month rate guarantee and does not contain a liquidated damages provision.[58]

As a direct result of the Supreme Court's *Isbrandtsen* decision, Congress enacted, on August 12, 1958, Public Law 85-626, which amends section fourteen to provide that nothing in the Shipping Act of 1916 "shall be construed or applied to forbid or make unlawful any dual rate contract arrangement" in use by conference members on May 19, 1958, the date of that decision, "unless and until such regulatory body disapproves, cancels, or modifies such arrangement in accordance with the standards set forth in section 15 of this Act."[59] The amendment expires by its terms on June

[55] WEBSTER'S NEW COLLEGIATE DICTIONARY 832 (1953) gives the following definitions of stifle: "1. To stop the breath of; to choke; to suffocate; also to cause the death of by such means. 2. To extinguish; quench; as to stifle a fire. 3. To smother; to keep or choke back; as to stifle one's sobs—v.i., 1. To die by reason of obstruction of breath. 2. To suffer difficulty in breathing, as by reason of air charged with smoke."

[56] 356 U.S. at 502.

[57] *Id.* at 494-95.

[58] Secretary of Agriculture v. North Atlantic Continental Freight Conference, 5 F.M.B. 20, 29 (1956).

[59] 72 Stat. 574, 46 U.S.C.A. § 812 (Supp. 1958).

30, 1960. Its stated purpose is "to provide a reasonable time for thorough [congressional] study of the entire operation of steamship conferences and their practices, the first in 44 years."[60] It validates dual-rate arrangements existing at the time of the decision unless cancelled or modified by the FMB, and it thus continues, on a temporary basis, a system that has been used by both shippers and the shipping lines over the years.[61]

As it now stands, the law (a) precludes the FMB from allowing the inauguration of a new dual-rate system which has the intent and effect of reducing the independent lines' participation in a trade to a level below that which existed before initiation of the system; (b) leaves doubt as to whether the Board may approve a new system not having such intent and effect; and (c) empowers the Board to disapprove any existing agreement which does not meet the criteria and safeguards developed by the Board in accordance with the standards of section fifteen.[62] The law also is unclear as to whether the Board may approve new exclusive-patronage-contract systems similar to those the Supreme Court found were reviewed by the Alexander Committee.[63]

III

CONFERENCES IN OTHER FIELDS OF TRANSPORTATION

A. Foreign Air Transportation

International air transportation, like ocean foreign commerce, is largely regulated by means of a conference system. However, as we shall see, the competitive forces in the two fields are different, and, as a result, the conference practices are different.

International air travel rates and practices are initially fixed and agreed upon through the medium of the International Air Transport Association (IATA), a private trade association whose member lines carry approximately ninety-five per cent of the world's international air traffic.[64] Unlike maritime conferences, each of which operates in a particular trade, IATA, through its three subconferences, sets coordinated rates on a world-wide scope.[65]

The Civil Aeronautics Board approved in 1945, under section 412 of the Civil Aeronautics Act of 1938,[66] the agreements that embody IATA's articles of incorpora-

[60] House Comm. on Merchant Marine and Fisheries, *Temporary Extension of Use of Dual Rates by Steamship Conferences*, H. REP. No. 2055, 85th Cong., 2d Sess. 1 (1958).

[61] Senate Comm. on Interstate and Foreign Commerce, *Continuing in Effect Until June 30, 1960, Dual-Rate Contract Agreements Approved Under Section 15, Shipping Act, 1916*, S. REP. No. 1709, 85th Cong., 2d Sess. 2 (1958).

[62] The Court of Appeals for the District of Columbia has already remanded a case in which the Board had approved a dual-rate system which went into use prior to the date of the Supreme Court's *Isbrandtsen* decision, so that the Board could reconsider the case in the light of the "unless and until" clause of P.L. 85-626. Benson v. United States, 263 F.2d 899 (D.D.C. 1959).

[63] See *supra* notes 33 and 57 and text to which cited.

[64] *Hearings Before the Antitrust Subcommittee of the House Committee on the Judiciary on Monopoly Problems in Regulated Industries*, 84th Cong., 2d Sess. pt. 1, vol. 1, at 375 (1956).

[65] Antitrust Subcomm. of the House Comm. on the Judiciary, *The Airlines Industry*, H. REP. No. 1328, 85th Cong., 2d Sess. 220-21 (1958).

[66] 52 STAT. 1004, 49 U.S.C. § 492 (1952).

tion, thereby exempting them from the antitrust laws.[67] Since then, it has periodically approved IATA's world-wide international rate and fare-fixing agreements. Although the CAB does not have direct authority over the level of rates and fares in international air travel, it may disapprove any IATA agreement which it finds does not conform to the standards of section 412. Thus, through the medium of approval of IATA agreements, the CAB exercises some control over the level of international air rates which it would not otherwise be in a position to do.[68] The inability of the CAB directly to regulate foreign air travel rates has caused it "reluctantly" to grant its approval of IATA's rate-making machinery.[69] It has repeatedly asked Congress for direct rate control over American air carriers in foreign commerce.[70]

IATA is principally concerned with passenger traffic, which, by its nature, is not susceptible to a system of shipper-tying contracts. Similarly, passenger conferences in the maritime field cannot use shipper-tying contracts. Both IATA and maritime passenger conferences, however, exercise control of the travel agents of their lines and limit the extent to which conference-approved agents may deal with non-conference lines.[71] Thus, an indirect method of tying passenger traffic to conference lines is used in both air and ocean passenger transportation.

In the field of air transportation, whether passenger or air freight, competition from independent lines is not an important problem.[72] This is basically attributable to the fact that, unlike the seas, which are traditionally free, there is no right of entry into the air space over the various nations.[73] Rate stability in the international air carrier field, therefore, stems from a condition which does not exist in the maritime field, and it cannot be said that the ability of international air lines to regulate themselves without the benefit of shipper-tying contracts is proof that the maritime freight conferences should be able to do the same.

B. Domestic Land Transportation

The railroads and other domestic carriers have long been organized into associations to facilitate joint action on rates and other matters. These organizations were encouraged by the ICC because they provided a method by which proposed actions

[67] Agreements approved by the CAB under § 412 are exempted from the antitrust laws by Civil Aeronautics Act of 1938, § 414, 52 Stat. 1004, 49 U.S.C. § 494 (1952).

[68] Antitrust Subcomm. of the House Comm. on the Judiciary, *supra* note 65, at 217. The FMB, which similarly does not have direct authority to regulate rates in foreign ocean commerce, has stated that if the rates of any conference become unreasonably high, it will disapprove the basic conference agreement as detrimental to the foreign commerce of the United States. See Weil v. Italian Line, 1 U.S.S.B.B. 395 (1935).

[69] Antitrust Subcomm. of the House Comm. on the Judiciary, *supra* note 65, at 217-18.

[70] *Id.* at 225.

[71] See *id.* at 204 with respect to IATA-approved travel agents; and FMB Agreement No. 120-74, in Trans-Atlantic Passenger Steamship Conference, p. 15, on file with the FMB, as an example of a maritime passenger conference travel-agent provision.

[72] See *Hearings*, *supra* note 64, at 1062-64, 1068.

[73] For a statement of the specific factors which tend to inhibit rate instability in international air traffic, but which do not pertain to maritime traffic, see Kharasch, *Conferences of Carriers by Sea: Freedom of Rate Fixing*, 23 J. AIR L. & COM. 287, 288 (1956). See also JOHN G. COOPER, THE RIGHT TO FLY 122-96 (1947).

of the carriers jointly could be initiated and submitted to that agency for approval.[74] Antitrust suits against these associations were brought to the attention of Congress,[75] which, as a result, amended the Interstate Commerce Act so as to add section 5a,[76] often referred to as the Reed-Bulwinkle Act, empowering the ICC to approve such joint organizations and exempt them from the antitrust laws if they meet specified statutory conditions.

The conditions specified in section 5a are that:

1. No agreement shall be made between different classes of carriers—railroads, pipelines, motor carriers, etc.—unless it is limited to joint or through rate matters.

2. Agreements covered by section five of the Interstate Commerce Act—pooling, division, merger, etc.—shall not be subject to, or approvable under, section 5a.

3. Agreements dealing with rates and service shall not be approved unless they provide that members not concurring in any determination shall have the right to act independently of it.

4. Any agreement not prohibited under the above conditions may be approved if, "by reason of the furtherance of the national transportation policy," the Commission finds relief from the antitrust laws should be provided.

There is a striking resemblance between the standard for approval under section fifteen of the Shipping Act of 1916 set forth in the *Swayne & Hoyt* case[77] and the following direction of the House Committee on Interstate Commerce to the ICC:[78]

> Congress . . . directs the Commission to determine whether the advantages to the public interest, through furtherance of the national transportation policy, are such as to outweigh the disadvantages to the public interest intended to be guarded against by the antitrust laws.

Thus, Congress directed the ICC to judge association rate agreements under a test similar to the one the shipping agencies had been applying to dual-rate systems since the date of the *Swayne & Hoyt* decision.

The right of a nonconcurring member to act independently of the association action with which it disagrees creates no impetus toward excessive rate instability mainly because carriers regulated by the ICC are under a duty to charge "just and reasonable" rates[79] and the Commission is authorized to establish maximum and min-

[74] House Comm. on Interstate and Foreign Commerce, *Amending the Interstate Commerce Act, With Respect to Certain Agreements Between Carriers*, H. REP. No. 1100, 80th Cong., 1st Sess. 3 (1947). "Since the law places upon the carriers the duty to initiate rates which meet the same standards that are applied by the Commission in reaching its determinations as to their lawfulness, it is difficult to see how the carriers can perform their duty in that regard without following a procedure similar to that employed by the Commission." *Id.* at 9-10. The joint associations provide a method by which such a procedure can be employed by the carriers.

[75] *Id.* at 3-4.

[76] 62 Stat. 472 (1948), 49 U.S.C. § 5b (1952).

[77] Swayne & Hoyt v. United States, 300 U.S. 297, 304 (1937).

[78] House Comm. on Interstate and Foreign Commerce, *supra* note 74, at 14. For a complete expression of the standards of § 5a, as interpreted by the ICC, see Western Traffic Ass'n—Agreement, 276 I.C.C. 183 (1949).

[79] Interstate Commerce Act § 1(4), 24 Stat. 379 (1887), 49 U.S.C. § 1(4) (1952).

imum rates encompassing the zone of reasonableness.[80] Other distinctions pointing up the marked tendency to rate instability in ocean foreign commerce and the lack of it in regulated transportation have already been discussed.[81]

There has been a recent development of dual rates in the railroad industry which is worthy of note here, despite the fact that a conference is not concerned. It is reported that the Soo Line Railroad proposes to introduce the so-called "guaranteed rate" system, which is substantially the same as the dual-rate system, so that it can divert steel products from competitive modes of transportation.[82] A guaranteed-rate system applicable to the intrastate movement of crushed stone between two points in New York has been published, effective March 2, 1959, by the Delaware, Lackawanna, and Western Railroad Company.[83] Thus, even in the Government-regulated railroad fields, at least some carriers think that a dual-rate system is necessary to meet the competition of other forms of regulated transportation.

IV

POSSIBLE LEGISLATIVE ACTION

The conference and dual-rate systems are presently undergoing thorough study by the House Merchant Marine and Fisheries Committee and by the Antimonopoly Subcommittee of the House Judiciary Committee. Our conclusions as to the legislative possibilities described here are based on the facts regarding conferences and dual-rate systems that have so far come to our attention at the time this article is is being written. Different or additional facts may be revealed by the current inquiries which could, of course, affect the validity of our views.

A. Open Competition

Congress can achieve unrestrained competition in the ocean foreign commerce of the United States by subjecting the carriers to the antitrust laws. The Alexander Committee decided against this course for reasons which seem still to be appropriate.[84] It would be contrary to the desire of the great majority of shippers and carriers.[85] It would, we believe, cause rate wars in times of overtonnaging, with the weaker lines[86] being either destroyed or taken over by the stronger ones.[87] The victors in a rate war would ultimately have to learn to live together, probably through some form of tacit agreement, in order to recover their rate war losses. The tendency

[80] Interstate Commerce Act § 15(4), 24 Stat. 384 (1887), 49 U.S.C. § 15(4) (1952).

[81] See *supra* notes 8-16 and text to which cited.

[82] Traffic World, Dec. 13, 1958, p. 27; *id.*, Dec. 20, 1958, p. 42.

[83] Freight Tariff 601 Filed by the Delaware, Lackawanna & Western R.R. Co., No. 5810, N.Y.P.S.C., June 29, 1959.

[84] 4 ALEX. REP. 416-17.

[85] *Id.* at 290.

[86] These would tend to include at least some American lines. Although American lines are eligible for a subsidy to meet the difference between their capital and operating costs and those of foreign competitors, the conditions attached to the subsidy are not conducive to short-run competitive warfare.

[87] According to the records of the Maritime Administration, Isbrandtsen Co., which cut rates and then successfully opposed in the courts the inauguration of a dual-rate system in the Japan/Atlantic and Gulf trade, has had a constant and drastic decline in carryings from Japan to North Atlantic ports in the United States since the conference opened rates in March 1953.

then would be for the remaining strong lines to concentrate on preventing new entries into the trade. The latter would find it almost impossible to commence service in the face of all-out rate competition. We, accordingly, do not think that open competition is feasible or long maintainable in the steamship industry.

B. Direct Rate Regulation

Congress could eliminate rate wars by requiring rigid rate regulation. The shipping agency probably would have to undertake this by setting a zone of reasonableness limited by maximum and minimum rates for all commodities in all trades, but it would be an almost impossible administrative task, for there are innumerable commodities and trades, and in each trade, there are many different lines with varying costs of operation and rate bases. It is questionable whether the shipping agency could obtain the true costs and capital expenditures of all foreign lines. Also, the agency would have to take account of the constantly changing tramp charter rates because these are largely controlling on liners as to many bulk commodities. A further, and perhaps paramount, obstacle is the fact that rate regulation would violate the traditional freedom of the seas and could lead to rate regulation and the setting of different rate levels by the nations overseas with whom this country trades. Obviously, the carriers could not operate under such circumstances, either as a practical matter or legally, unless the national differences were resolved.

C. Continuance of the Conference System

Congress can continue the conference system and either eliminate all tying agreements, authorize a standard dual-rate system in all trades, or allow the use of dual rates contingent upon certain trade conditions and safeguards.

If dual rates are to be eliminated without resulting rate instability, some provision for control of the practices of independent lines must be enacted. The form this should take is no easy problem. One suggestion is that it could be made an unfair practice for an independent to cut rates below a level that would be compensatory to the independent if it were carrying cargo at the average rate of vessel utilization in the trade. This qualification is necessary because, as we have seen, the compensatory rate per ton is normally much lower for the vessel which fills its ships by cutting rates than for the carrier which sails with substantial free space because it has adhered to the conference rates. It would solve nothing to calculate the compensatory rate of the independent upon a basis which includes cargo obtained through rate-cutting. Since the costs of only a single carrier would generally be involved, it should not be too difficult to test the allegedly "fair compensatory rate" of the independent. This, however, would take time, and litigation for the purpose would necessarily lag behind the actual practices of the independent. The conference might find it more practical to open rates rather than to await the outcome of the litigation. Under such circumstances, this legislative suggestion could lose some of its value.

It is at least arguable that dual rates should be expressly sanctioned by legislation. Both dual rates and deferred rebates are permitted under British law.[88] The conference system provides many benefits which are attainable only by the use of a tying device. In view of this, it has been contended that the most effective tying arrangement should be used, even if it eliminates independent competition.[89] Such an arrangement could, however, deprive our foreign commerce of the stimulus of independent competition. That would not be so if Congress enacted a provision which would allow the dual-rate system only where needed to prevent rate instability and conditioned upon appropriate safeguards for shippers and independent carriers.

Such a statute has much to recommend it. It could include the safeguards which have been delineated in the shipping agency decisions. Among other things, this would insure that the system will be adopted only where necessary for rate stability, and not for other reasons, such as preventing independents from entering trades in which they do not at the time operate. The legislation also could provide for periodic review (perhaps every two years) of each system by the shipping agency as a useful safeguard in discontinuing systems that are no longer needed and bringing to light other changed conditions.[90] To prevent the deterioration of trades pending the results of the proceedings upon applications to institute dual-rate systems, it would be well to authorize the agency to approve, prior to hearing, systems which it finds are prima facie necessary to prevent instability. A time limit for such prehearing approval might be written into the statute.

D. General Observation Regarding Possible Legislative Action

The shipping agencies have historically considered that they must authorize the use of the dual-rate system under certain circumstances if our ocean foreign commerce is to be free of harmful instability and ruinous competition. The Supreme Court has very recently found that the Shipping Act does not empower the FMB to approve dual-rate systems, at least where their intent and effect is to stifle independent carriers in the trade. This decision, as was the decision of the Court of Appeals for the District of Columbia holding dual rates illegal per se, was based entirely on the intent of Congress in passing the 1916 Act. Neither of these decisions held that the Board should not have the power to approve the use of a dual-rate system limited by proper safeguards, nor that it would be illegal for it to be given such power.

It is to be hoped that the proposal to enact legislation will not be considered an effort to overrule, by legislation, the decision of the Supreme Court. Actually, the issue before the Court was not the same as that now before Congress. The question before the Court was simply to interpret the meaning of a statute (sections

[88] Royal Commission on Shipping Rings, *supra* note 23, at 50-52.

[89] *Cf.* dissenting opinion in Contract Rates—Trans-Pacific Freight Conference of Japan, 4 F.M.B. 744, 763 (1955).

[90] *Cf.* the annual review of charters provided for in 60 Stat. 43 (1946), 50 U.S.C. App. § 1738(e) (1952).

fourteen and fifteen of the Shipping Act of 1916). The question now before Congress is the merit of the dual-rate system. Thus, if Congress decides that it is now necessary to give the FMB power to approve dual-rate systems, this would in no way conflict with the decision of the Supreme Court.

On the basis of its current investigations, Congress will be able to determine fairly whether the regulatory pattern that has been in practice under the 1916 Act, and which is fundamentally based on the conference system, is still useful. If the answer is negative, a new regulatory pattern can be enacted. If, on the other hand, Congress determines that the 1916 Act employs a pattern of regulation which is still fundamentally the most practical method of regulating foreign shipping, it can modify the system to eliminate the problem areas which have manifested themselves since 1916. The most important problem area is, of course, the use of the dual-rate system. The Board will undoubtedly welcome a new delineation of its powers and any guidance Congress can provide.

TRANSPORT COORDINATION AND REGULATORY PHILOSOPHY*

LEE J. MELTON, JR.†

INTRODUCTION

"Within the short span of one generation this country has witnessed a transportation revolution."[1] This growth of the transportation industry and the rapid and varied innovations in the various transport media have been one of the significant economic developments in the twentieth century. As the structure of the industry has changed, it has been necessary to re-evaluate the governmental controls applied and to examine carefully the economic aspects and competitive relationships of the several forms of transport.

Much literature in recent years has been devoted to the "transportation problem." Everyone agrees that there is a problem, but perhaps all would not agree to its exact nature. Several years ago, in a study of the Motor Carrier Act of 1935,[2] this writer wrote that certain proposed revisions would not solve the primary transportation problem,[3]

> . . . which is the uncoordinated and excessively competitive operations of transport agencies subject to diversified regulatory acts, different commissions, and unrelated promotional policies. Until such time as a coordinated transportation system is organized to function under integrated regulation, revisions will serve primarily as palliatives.

His thoughts on the problem and attempts to revitalize regulatory policy have remained basically unchanged.

Transport coordination is a problem of long standing, recognized and treated by numbers of scholars, transport executives, and government officials. The term has, accordingly, come to have different meanings, or shades of meaning, to different people. The use of the term ranges from the description of the loosest cooperation between transport media to the combination of different forms of transport. For purposes of this paper, we shall use the first part of a definition by Peterson:[4]

> Co-ordination is the assignment, by whatever means, of each facility to those transport tasks which it can perform better than other facilities, under conditions which will insure its fullest development in the place so found.

* Part of the material in this paper is reproduced from Melton, *An Integrated Approach to the Transportation Problem*, 23 So. Econ. J. 398 (1956-57).

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[1] PRESIDENTIAL ADVISORY COMM. ON TRANSPORT POLICY AND ORGANIZATION, REVISION OF FEDERAL TRANSPORTATION POLICY, A REPORT TO THE PRESIDENT 1 (1955).

[2] 49 Stat. 543, 49 U.S.C. §§ 301 *et seq.* (1952).

[3] Lee J. Melton, Jr., A Re-examination of the Contract Carrier Regulation and Exempt Provisions of the Motor Carrier Act of 1935 and Their Impact on Common Carriers ix (unpublished thesis in Louisiana State University Library 1953).

[4] Peterson, *Transport Co-ordination: Meaning and Purpose*, 38 J. POL. ECON. 660, 680 (1930).

Since the problem of coordination is enmeshed in an environment that is as political as it is economic, the solutions can seem even more complex than they actually are. Aside from the effects of political influence and vested interest, there is the basic philosophy concerning the method to be used. "Coordination of the services of different transport media can be effected by administrative action. But it could also be effected—and perhaps with greater economy and efficiency—through the market processes."[5]

Several solutions for solving the transportation regulatory problems, among them that of coordination, within the private ownership sphere have been put forth in recent years. The economic difficulties are, evidently, expected to work themselves out if the proper regulatory climate and policy are achieved.

Solutions usually revolve around four proposals, or combinations of these proposals. These are (1) consolidation of administration under one regulatory body; (2) the merger of regulatory and promotional activity; (3) uniformity of regulation for all transport agencies; and (4) a selective overhaul of the existing pattern, with a view to placing greater emphasis on competition and less on control. This latter view is probably best exemplified by the Cabinet Committee's report.[6] In spite of the differences in these approaches, all have one characteristic in common: They assume that the solution will be found within the existing framework of interagency competition, under some degree of regulatory control.

Competition does offer many apparent advantages to our transportation system. Most of us are dedicated to a competitive economy. We look with favor upon developments that strengthen the competitive concept and with disfavor upon those which tend to weaken it. Interagency competition, therefore, fits our basic economic philosophy.

The various means of transport have progressed rapidly in technological innovations. Much of this can be attributed to the competitive struggle between water, rail, motor, and air carriers. It may be further asserted that better service has been instituted and that lower rates have resulted from the competitive relationships of the several forms of transportation. Certainly pickup and delivery practices of rail carriers have been stimulated by competition from motor carriers, to name but one example. Also, there is no denying that commodities and communities which have a number of transportation alternatives usually enjoy lower rates than those where competition is absent.

Nevertheless, the writer considers that no adequate, lasting solution will be found within the competitive framework. It will be suggested that our long-run solution to the transportation problem may be found not so much in changes in regulatory practices as in the economic structure of the subject regulated. This is by no means a new thought, but it has not been much stressed in the past decade until a resurgence of the view in the past two years. It is proposed that companies utilizing all forms

[5] CLAIR WILCOX, PUBLIC POLICIES TOWARD BUSINESS 643 (1955).
[6] PRESIDENTIAL ADVISORY COMM., *op. cit. supra* note 1.

of transportation would replace the separate operating types of rail, motor, water, and air that we have at present. Hereafter, such multimedia firms will be spoken of as "transportation companies."

The best long-run solution is not necessarily the one that will be adopted; and, even if it is, the length of time required may be inordinately long. For this reason, the separate agency approach cannot be ignored. At the least, it is vital to the interim period. At the most, it may be the best solution we can achieve.

In light of the above discussion, this paper will submit two basic proposals for coordination of the domestic transportation system. The first, and perhaps soundest, will be predicated on the transportation company. As an alternative, suggestions for coordinating under the separate transport agency approach will be explored.

I

SOME AREAS OF VARIATION

Because of the American dislike for regulatory activity, the greater part of the legislation affecting transportation is not the result of careful, long-range planning, but, rather, a hodge-podge creation based upon expediency and custom. Unfortunately, once custom becomes accepted, it takes on an aura of finality, and revision and repeal become exceedingly difficult.

Today, transportation is extremely complex. Well-developed common carrier networks in the rail, water, motor, and air transport fields offer service to most points in the nation. In addition, there is extensive use of contract, exempt, and private water and motor carriage, as well as specialized areas of air transport. The days of the rail monopoly are long gone. All of this has given rise to a multimedia competitive structure in transportation with which existing regulatory bodies find it increasingly difficult to cope. Of these many problems, none presents more difficulty of solution than that of the interagency relationship.

The Interstate Commerce Commission's authority over rate-making has steadily evolved, until it is well nigh absolute. The Commission may prescribe the maximum, the minimum, or the exact rate. From the standpoint of current competitive relationships, the power to control minimum rates is the basic ingredient. When authority over minimum rates was acquired under the Transportation Act of 1920,[7] only rail carriers were concerned. The minimum rate power was exercised primarily to prevent loss of revenues by carriers, to preserve existing rate structures, and to compel increases in intrastate rates which burdened interstate commerce. More important now, because of the increased coverage of the Interstate Commerce Act[8] and the well-developed state of additional modes of transport, is the prevention of destructive competition and the preservation of all forms of transportation in accordance with congressional policy.

[7] 41 Stat. 484, 49 U.S.C. § 15(1) (1952).
[8] 24 Stat. 379, as amended, 49 U.S.C. §§ 1 *et seq.* (1952).

In addition to its rate-making control, ICC authority over other aspects of the rail industry is extensive—more so than over any other media—and regulation of the other forms of transport has increased in scope and intensity. A thorough discussion of the provisions of the Interstate Commerce Act, the Federal Aviation Act of 1958,[9] and other applicable legislation lies beyond the scope of this paper. It will be more pertinent and suffice for our purposes to enumerate some of the more troublesome areas of variation and inconsistency in regulation and promotional activity as applied to the several carriers. No effort will be made at this point to justify or condemn such variations.

1. There is no uniformity of regulation. Even the Interstate Commerce Act is divided into four parts, with varying treatment of the agencies so regulated.

2. One of the most noticeable distinctions between rail and other forms of transport is the recognition of several classes of the latter—*i.e.*, common, contract, private, exempt, and the like. This is a major source of difficulty.

3. There is no single regulatory agency. Further, the regulatory policy is not coordinated with promotional policy, although each has critical bearing on the other. The Federal Highway Act of 1956[10] was a prime example of this. All of the forms of transport, except rail, currently are the recipients of varying amounts of public aid in the form of direct or indirect subsidy.

4. The intent of Congress seems to be the compulsion of more competition between the transport agencies, without, at the same time, abandoning regulation designed to preserve individual competitors. In this respect, the problem is somewhat similar to that encountered in the antitrust field, where the same two objectives come into conflict.

5. Labor relations have become increasingly troublesome in transportation. Yet, only the railroads and air lines are subject to legislation specifically aimed at preventing work stoppages in these vital services.

The fundamental difficulties in eliminating these trouble spots and achieving satisfactory coordination hinge on two issues, the role to be played by interagency competition and the weight to be given efficient allocation of resources to and among the various means of transportation.

II

COMPETITION AND RATE-MAKING

The writer has indicated that no adequate solution will be discovered within the competitive framework. The agency approach to transport regulation, where the several modes of transport are considered as separate entities, no longer suffices to cope with current situations. Of the questions faced by federal and state regulatory bodies—not to mention the carriers themselves—probably the most pressing is that

[9] 72 Stat. 731, 49 U.S.C.A. §§ 1301 *et seq.* (Supp. 1958).
[10] 70 Stat. 388, as amended, 26 U.S.C. §§ 4041, 4061, 4070-73, 4081 (Supp. V, 1958).

of competition between the different forms of transportation, each with specific characteristics which give certain cost and service advantages and disadvantages in relation to the others, as well as overlapping features which make advantages and disadvantages less pronounced. Speed and quality of service are of competitive import, but the major impact must come from the pricing or, in this instance, rate-making.

Two aspects of rate-making present themselves here. The first relates to what might be called the natural zone of reasonableness, whose upper limit is set by the highest rate which can be charged without destroying or diverting the traffic, and whose lower limit is the point below which the carrier would incur costs in excess of revenue on each unit of the traffic carried. Will carrier management, if unregulated, select a more economically and socially desirable rate than under the present setup? In other words, is there sufficient competition in the transportation industry to depend upon the workings of the market place to establish rates and fares in such a way that each mode of transport will be relegated to its proper sphere of activity? Competitive rates must, to be effective, be related to the cost of producing the service, and determination of the cost of transporting various items—when the transportation of such an item is only one of several hundred different services that can be produced simultaneously by a given plant—is virtually impossible.

In spite of the many factors considered in rate-making, such as value, density, vulnerability to damage, and the like, the most important one is probably comparison. This means that rates are justified by virtue of their relationship to other rates. But what of the rate selected for this comparison? It, too, was no doubt created on a comparative basis, or else its origin is more or less untraceable, and it, like Topsy, just grew. Because of the extreme difficulty of establishing a specific rate on a cost basis, rate-making might well be considered more of an art than a science. Value here is not found; it is made on the basis of the presumably reasonable judgment of reasonable men.

The second has to do with what we might call the regulatory zone of reasonableness. Here, the upper and lower limits are subject to Commission edict, and the higher zone may be less than the consumer would pay if he had to, and the lower zone may be above that which would be charged by the carrier if unrestrained. Although the Commission can prescribe the exact rate to be charged, the carrier is ordinarily free from Commission restraint within the regulatory zone of reasonableness.

In interagency competition, however, the establishment of the minimum rate is tantamount to establishment of the actual rate. The crux of the present-day rate-making controversy, then, lies in this minimum rate factor. Specifically, it concerns these items: (1) Can out-of-pocket costs be determined accurately enough for this purpose? (2) Is out-of-pocket cost a sound basis for competitive rate making? and (3) Can unrestrained competition be allowed, when related to minimum cost, in an industry where discriminatory pricing is permissible and prevalent? Cost allocation is a complex proposition for transport firms because of the multitude of services

that their machinery is capable of producing. At any given time, such firms will have a sizable physical plant, capable of producing an indeterminate amount of transportation service. To some extent, the costs of operating the plant are independent of the quantity of service provided. In addition, there are expenses related directly to the performance of any specific commodity transportation. The rate charged, therefore, is a component of two factors: a share of the overhead or common expense and the added expense directly incurred by the specific transportation.

From the standpoint of an economic ideal, perhaps, the rates should reflect total cost, consisting of direct expenses and a fully allocated share of the overhead or common expense. Actually, this is not always possible. For one thing, it is difficult to allocate the common costs, for reasons explained previously. For another, it is not always desirable, from either the standpoint of the carrier or the shipping public, to levy fully allocated charges. As long as capacity permits, additional traffic that returns direct cost plus some contributions to overhead, no matter how slight, provides additional revenue to the carrier and, since the over-all revenue is restricted to a recovery of costs plus a reasonable return on investment, makes possible lower rates to shippers that do pay fully allocated costs. Such pricing is, of course, discriminatory, but it is permitted on the theory that, so long as the discrimination is controlled, it is beneficial. On the other hand, the freely competitive use of discriminatory pricing can have adverse effects on rate levels and on traffic that is noncompetitive.

It must be clearly kept in mind, then, that minimum rates are often discriminatory and that lowest out-of-pocket cost does not necessarily go hand-in-hand with the lowest average total cost. Suppose an item can be transported by either of two modes of transportation. Carrier *A* would need to charge one dollar to recover total cost, consisting of fifty cents overhead and fifty cents direct expense. Carrier *B*, on the other hand, would need to charge ninety cents to recover full cost, consisting of thirty cents overhead and sixty cents direct cost. In a competitive situation, if rates were permitted to gravitate toward out-of-pocket costs, Carrier *A* would have the advantage, although it is actually the high-cost carrier when all factors are considered.

From the standpoint of sound, economical use of natural resources, another view of the above example deserves consideration in order to reflect certain other factors of vital consequence. The economical carriage of one commodity or a few commodities must be balanced against the efficient carriage of many commodities. Troxel writes:[11]

> A pipeline, taken alone, can often haul oil or gasoline more cheaply than can a railway line. But railways are still required for other commodity movements, and even some oil movements along the same paths. Or motor trucks can carry some commodities at lower costs and, on occasion, offer higher qualities of transport service than railways; but the railway technique remains for other traffic. These and other situations of partial substitution cannot be controlled to efficient transport ends, measured in the aggregate, if each

[11] CHARLES EMERY TROXEL, ECONOMICS OF TRANSPORT 327 (1955).

technique is treated as a separate or a special case. No matter what their popularity, cost comparisons between techniques are not enough.

This situation must be accorded attention in any formulation of national transportation policy.

Discriminatory pricing is an accepted American institution. Impossible under conditions of perfect competition and lamented by many economists, discriminatory pricing policies are an integral part of the marketing philosophy of many business firms. Product differentiation, based on different trade labels representing various degrees of quality which exist to a considerable extent only in the minds of advertising agencies and a gullible public, is the outstanding example. The buyer usually has several sources from which to choose, however, and these sources enjoy no privileged status in the eyes of public authority.

This is very definitely not the case in the purchase of transportation from a common carrier. There may be no satisfactory substitute, nor, under controlled entry, may there be the possibility of any development of a substitute. The buyer is paying a discriminatory price not through choice or lack of knowledge, but through necessity. One may take the view, of course, that there is nothing particularly onerous or reprehensible about value-of-service pricing so long as competitive conditions exist and that, since the establishment of several well-developed media of transport, competitive conditions actually do exist.

To evaluate the validity of the last-mentioned position, it is necessary briefly to examine a concept of workable competition. Except for use as a model, the idea of perfect competition, with its requisites of homogeneous product, many buyers and sellers, mobility of resources, and knowledge of the market place, plays little part in modern economic analysis. The majority of economists feel satisfied if there are enough buyers and sellers, together with some opportunity for entry and withdrawal, to assure reasonably dynamic allocations. To function satisfactorily, competitive conditions of this sort should effect, in so far as the transportation system is concerned, the following achievements: (1) allocate resources between transportation and other industries; (2) allocate transportation resources among the various media; and (3) allocate the services of each transport medium in the most effective way.

Concerning the first point, such allocations in our economy are not fully effected by competitive forces. In the absence of government financial assistance, which, by and large, has been no greater to transportation than to several other segments of the economy, the transportation firms would have had to attract capital on the same basis as anyone else. But it must be remembered that the subsidy element in air, water, and highway transportation causes some distortion. This complex subject lies beyond the scope of this paper, but it suffices to say that competition is not the sole basis for the fundamental allocation of resources between transportation and other economic activity.

The allocation of resources among the media of transport and among firms within a given media is not completely dependent upon competitive conditions, either. Let us assume that a nontransportation firm finds that its scale of operations is too small for effective production. It may, subject to its financial limitations, expand its operation and sell over a wider area. A common carrier does not find this so easy to do, because its territorial operating rights are definitive and permission to expand may not be forthcoming from appropriate regulatory bodies. Or suppose useful techniques are developed by a nontransportation firm's competitors—techniques, perhaps, that partially or completely outdate existing methods. Again, the firm would adopt the improvements as rapidly as possible. But transportation firms are rather rigidly delineated, and common carriers of a given mode of transport are prevented from branching into other forms of transportation.

The efficacy of the individual carrier is not allowed to resolve itself under competitive conditions with others of its own kind. Common carrier rates between points served by competing lines are ordinarily published by conferences or bureaus. Although the individual carriers may abstain from such tariffs, as a practical matter, this is not feasible, so weak roads may get such business as readily as strong ones, and circuitous routes may be used as frequently as direct ones; for in either case, the rate is the same. Nor is the rate necessarily geared to the cost of the most efficient carrier. It may, and frequently does, reflect averaging or umbrella rate-making not because it is forced by the regulatory commission, but because it is the wish of the carrier group. Further, controlled entry protects, to a considerable extent, the vested interests of a given form of transportation. Certainly, transport firms need not fear the unrestricted onslaught sometimes encountered outside the field.

It is apparent that conditions prerequisite for effective competition are now lacking in transportation. This does not, however, necessarily indicate that conditions required for competition cannot be achieved if regulation were abandoned.

What results can be expected from competitive pricing among these agencies? The managerial prerogatives, whose infringement is so often lamented, would be restored; but as a group device, because of the aforementioned bureaus. As far as cost determination is concerned, the situation would remain unchanged, except the allocation might conceivably be closely related to the demand for an alternate service provided by competing carriers. The most hoped-for accomplishment is that a more rational allocation of transportation resources would result.

The writer has serious doubts about the certainty of this occurrence. First of all, there cannot be effective competition in conjunction with regulation. The terms are in themselves contradictory. So long as firms are not free to enter and leave an industry at will, to expand whenever the management deems it necessary, or to imitate the methods and devices of more successful rivals, a " competitive" rate cannot be relied upon as an economic rationing device. Further, the fixing of prices and control of earnings by public authority, if followed consistently, will, for obvious reasons, undermine a competitive structure.

It is interesting to note that few of the advocates of competition as the prime allocator in transportation have ever suggested that regulation be abandoned. A minimum of regulation is always tolerated to prevent the rise of "destructive" competition. It is suggested by this writer that competition seldom, if ever, destroys anything but individual competitors, and, if the underlying conditions for effective competition are present, this should accrue to the benefit of the system. On the other hand, if the conditions requisite for effective competition are not present, as in the utility field, the results will likely not be beneficial. Perhaps there is still something of the utility complex in transportation, in spite of what the Cabinet Committee calls the growth of "pervasive competition."[12] The reluctance of transport executives to give up regulation would seem to underline some lack of faith on their part as to the effectiveness of competition.

If regulated competition should be abandoned and competition relied upon completely, the result would be the end of the common carrier, for the common carrier is not basically competitive by nature. These carriers would not be able to withstand the diversion of the more desirable traffic to the noncommon carriers. It is doubtful if the economy is ready to abandon its system of public carriage, for the link between the common carrier and the common welfare is still a strong factor with which to reckon.

Of the alternatives to the existing method of handling interagency competition, greater reliance upon competitive rate-making is a delusion. There can be no effective competition under regulation; and, in the absence of regulation, the transport system would be demoralized. All of this suggests, then, that the integrated transport firm—the transportation company—may be a more satisfactory and lasting solution.

III

TRANSPORTATION COMPANIES

These transportation companies have definite strengths that might eliminate or mitigate certain of the existing problems in transportation. The use of these companies would remove the interagency conflicts that currently plague the carriers. At least this would be true of the existing conflicts between common carriers. Unless contract, private, and exempt carriage are defined and regulated in such a way as to prevent many of the abuses associated with such transportation, a key trouble spot would remain. Nevertheless, the elimination of interagency rivalry between the common carriers would remove one of the major obstacles to a solution of transport coordination.

The transportation company is an agency in which coordinated transport service can be effectively accomplished. The management of such companies should be in a position to select the means of transport best suited, from the standpoint of service and economy, for the various operating and demand situations encountered.

[12] PRESIDENTIAL ADVISORY COMM., *op. cit. supra* note 1, at 2.

The transportation company provides a means of achieving more efficient use of transportation resources. There are two possible ways in which the increased efficiency might materialize. One is the elimination of the waste and duplication that comes from the existence of a number of competing media. The coordinated effort of the integrated company should permit the abandonment of facilities whose function could be more effectively performed by some other medium or combination of media. A second saving might come through the operations of economy of scale—the substitution of large-scale firms for a multitude of small ones. It has long been contended that expanded size of a transportation firm would bring about substantial decreases in unit costs. Today, there is some question as to the extent such economies are actually realized. Koontz found that the route structure and density of traffic were of far greater importance than the size of the firm.[13] Roberts reached much the same conclusion in a recent study of motor carrier costs.[14] A comparison of financial and operating statistics of various size rail carriers indicates some possibility that this is also true of railroads.

The fact that such economies may not be as great within each medium as once thought does not preclude such economies from the integrated firm, but mere size alone is not necessarily the most important characteristic of the transportation company. Rather it is the ability to eliminate duplication and to exploit a coordinated transportation system.

The transportation company is not, however, without its weaknesses. There is the possibility of suppression of other media of transport by the dominating agency in the organization. The most often-voiced fear, when coordination or combination of the several modes of transport is mentioned, is that such an organization would be rail-dominated. The possibility of domination of one type by another is admitted. If permitted to occur, it would be a deterrent to the hoped-for result. It does seem unlikely, however, that such a bias could be successively passed to subsequent managerial groups over a period of time.[15]

Similarly, many voice the fear of complacency of the management of such transportation companies. With the element of competition removed, what incentive will those who operate the enterprise have to increase their efficiency of operations, either through better utilization of a given technology or through the introduction of technical innovations? The question of incentive is a pressing one. A limited amount of competition between transportation companies might be permitted, and some stimulus might come from private carriage. A more direct monetary stimulant might be provided through the adoption of some sort of sliding-scale basis for rate control, under which earnings in excess of what is considered an adequate rate would be shared by both shippers and management.

[13] Koontz, *Domestic Air Line Self-Sufficiency*, 42 AM. ECON. REV. 103 (1952).

[14] Roberts, *Some Aspects of Motor Carrier Costs: Firm Size, Efficiency, and Financial Health*, 32 LAND ECON. 228 (1956).

[15] See HAROLD G. MOULTON & ASSOCIATES, THE AMERICAN TRANSPORTATION PROBLEM 890 (1933).

Also in the nature of a weakness, or perhaps better described as a stumbling block to creation, is the difficulty of formation. The antagonism of the management of the various transport media would make voluntary establishment on a cooperative basis most difficult to accomplish. Motor, water, and air carriers would fear domination by rail management, and logically so. A large rail system would bring the greater amount of assets and tonnage into a transportation company and would expect this contribution to be reflected in the apportionment of equity. Nor would compulsion by governmental authority be palatable to either the transport firms or the majority of the general public, even in the unlikely event such legislation should escape the condemnation of the courts.

Under what conditions, then, could transportation companies conceivably be established? One possible arrangement would be the purchase of control of the needed media by an outside corporation formed for the purpose, with subsequent merger under new management. Such an event would require a change in both transport regulation and antitrust law, but this way does alleviate fears of control by any one form of transport.

A second way lies in removing the restrictions on the utilization of one form of transport by another medium—for instance, the operation of a motor carrier by a railroad. Such restrictions affect rail carriers primarily, for few motor, air, or water lines are in a position to institute rail service. The removal of these limitations would mean that rail carriers would be free to form transportation companies. Still another possibility is the acceleration of consolidation of like means of transport. These firms might then be more easily merged into transportation companies.

If transportation companies were formed, what should be the ultimate climate for their operations—conditions of controlled competition, or exclusive territorial operating rights? If the first condition prevailed, there would undoubtedly be some conflict between regulation and the competitive urge; but effective regulation should be more easily achieved than at the present time, because of the structural homogeneity of the firms involved. The latter course would mean a sharp break with existing regulatory policy.

It is not easy for an economist of orthodox training to advocate controlled monopoly or near monoply. Still, this appears to be the inevitable solution to the formation of an economic and coordinated transportation system, and the writer proposes that the transportation companies operate under these conditions. They would, in effect, be treated as a public utility. The change is not so marked as it might appear at first glance. Common costs would continue to be allocated on a demand basis, and rates would still be related to value of service as long as such value was above out-of-pocket cost. Earnings control would keep the general rate level within reasonable bounds, and the Commission power over individual rates would care for specific instances of unreasonable or discriminatory charges. The only thing missing under the regional monopoly would be the fiction of allocation by interagency competition.

If some reliance on competition is insisted upon, then the transportation companies could be granted overlapping territories, as were the rail carriers. The ensuing activities in the competitive areas would have to be regulated in much the same fashion as the rail carriers before the advent of effective motor transportation, with many of the difficulties attendant to that era and the present.

If the transportation company could be successfully operated, most of the so-called coordination problems that exist at present would be eliminated, and control of those that remained would be simplified. Specifically, any justification that might now exist for separate commissions and regulatory provisions would be removed. The interagency competition between common carriers would disappear with the separate corporate entities. It might be too much to expect that the transportation company would be any less disposed to accept public aids than the individually subsidized modes, but since such aids would no longer be critical as a competitive factor, it would perhaps be easier to approach promotional policy with better perspective.

IV

PIECEMEAL APPROACHES

Even if we assume that the transportation company will prove to be the most satisfactory long-run solution to the problem of transport coordination, there is no evidence that the public, government, or the transport firms are anxious to accept it. Such support as is evidenced at the present time comes principally from railroad groups and interests, but it may be that the rail carriers have become interested in the acquisition of competing forms some twenty-five years too late. It is well to remember, also, that the public is not always interested in the maximum in efficiency. They may value competition among transport firms as a principle, even if there is added cost involved. They may insist on promoting certain types of transportation, regardless of the economic justification for such action.

If the transportation company is to be a long time in coming, with more than a remote possibility that it may not come at all, what measure of coordination may be achieved in the face of the separate agency approach? What may be expected depends on (1) whether a piecemeal or positive approach to policy revisions is followed; (2) the public attitude toward the equitable treatment of transportation costs —*i.e.*, the question of public aids; and (3) the amount of competition relative to regulation.

In 1954, the President established the Presidential Advisory Committee on Transport Policy and Organization, requesting that it undertake a comprehensive review of over-all federal transportation policies and problems and submit recommendations for the consideration of the President and Congress. The findings of this Cabinet Committee, while touching on several of the trouble spots of transport legislation and while purporting to be positive in nature, are representative of the piecemeal approach to policy revision. The Cabinet Committee, in its appraisal of national transporta-

tion policy, proceeded from the fundamental premises that the transportation system operates in a general atmosphere of pervasive competition, that adjustment of the regulatory programs and policies to these competitive forces were long overdue, and that restoration and maintenance of a progressive and financially strong system of common carrier transportation is of paramount importance to the public interest. To accomplish these ends, the Cabinet Committee suggested a number of revisions in public policy.[16]

First, and most emphasized, was increased reliance upon competitive forces in rate-making. Competition was to be stimulated by (1) limiting the regulatory authority of the ICC in rate control to the determination of reasonable minimum and maximum rates; (2) restricting the duration of the time period for which the Commission has the power to suspend rates; (3) removing the requirement that rail or water common carriers obtain prior approval for fourth-section relief where necessary to meet competition and when the charge is not less than a reasonable rate; and (4) legalizing volume freight rates when based upon cost differences and when established to meet competition.

The other recommendations of the Cabinet Committee called for a stricter definition of private and contract carriage; the requirement that contract carriers publish actual rather than minimum charges; the repeal of the bulk-commodity exemption applicable to water carriers, so that such transportation might be subjected to regulation similar to that applicable to other transportation; the tightening of standards for qualification as a nonprofit association for exemption from regulation as a freight forwarder; empowering the Commission to override certain state service requirements if continuance of such service would unduly burden interstate and foreign commerce, provided adequate substitute service were available; and the clarification of agricultural commodity exemptions.

If one assumes that the Cabinet Committee's emphasis on increased reliance on competitive forces in rate-making was proper, a serious omission in its report was the failure to provide the basis for such competition. Competition is effective only when competitors are placed on an equal footing, and no efforts were directed toward this fundamental end. Specifically, there should have been exploration of the question of public aids and the possibility of user charges to reflect these benefits; and the area of uniform regulation should have been examined with some care.

In the ensuing years, a good part of the principal recommendations of the Cabinet Committee have been enacted into law. The result, however, has not been any great feeling that transportation problems are solved or are even in the process of being solved.

The Cabinet Committee made no direct mention of air transport, even though it is a dynamic and rapidly growing form. The last session of Congress revised the regulation applied to air carriers with the passage of the Federal Aviation Act of 1958, although the economic regulation was left virtually unchanged.

[16] PRESIDENTIAL ADVISORY COMM., *op. cit. supra* note 1, at 6 *et seq.*

It is imperative that the improvement of future transportation policy should include promotional activity—that is, the planning, financing, and construction of transport facilities—as well as regulation. The two are inseparable; but so far, legislation respecting the economic regulation of the carriers has ignored the factor of promotion, and vice versa.

No comprehensive plan for the promotion of the several forms of transportation currently exists. The agencies are considered separately, without regard to the impact on the total transport network. If regulatory and promotional activity are to remain in separate hands, some means must be found for coordinating the two. Without this, the effectiveness of efforts to coordinate the transport system under the separate-agency approach will be limited. It may well be that the public will choose to continue to promote certain spheres of transportation through the direct or indirect grant of public aids, but the consequences of this for the nonsupported or inequitably supported agency will be of the negative type, and competition will have to be carefully watched and controlled in the interest of maintenance of effective transportation.

As mentioned previously, no serious consideration has been given by either the management of transport firms or by the Government to the abandonment of restraints on competition, in spite of the talk about the pervasiveness of such restraints. The question is, then, how much can regulation be relaxed and how much competition can be substituted for control? Unless the public and transport management are willing to pay the short-run costs to obtain the expected long-run benefits of competitive transportation, the answer is, not very much. There is no evidence that transport firms wish to engage in such competition, except on their own terms. Some years ago, Dr. John Ise, then of the University of Kansas, spoke at a dinner sponsored by the College of Commerce of Louisiana State University. One of his comments was to the effect that those who speak loudest about promoting competition will bear the closest watching. The thought is still appropriate! It is doubtful that we shall get enough competition to rely on it to allocate transportation resources. It is possible that we shall get enough to make the allocation on other bases more difficult.

Even if competition under unified and comparable regulation is the course adopted, there remains the question of the form the competition should take. There are two clearly distinct types that operate concurrently. One is the intra-agency competition between like forms, such as railroads, and the other is the interagency competition between different kinds of transport, such as rail and motor. Is it necessary to have railroads compete with railroads and motor carriers with motor carriers, or will competition between different forms suffice? If interagency competition is deemed sufficient, regulatory policy and practice might be revised to permit, and even encourage, the consolidation of like agencies into fewer and more economical units. The writer feels that the increased integration of similar forms of

transport will be necessary, no matter what the ultimate climate of transport operation.

V

PUBLIC AIDS AND PROMOTION

While the probability of getting an optimum of coordination without an optimum of integration is somewhat remote, this does not mean that the transport network cannot be more effectively coordinated than it is at present. The fact that we have failed to achieve it so far is the result of our dislike for disturbing established economic patterns. "America needs all forms of transportation" is sometimes used as a slogan by transportation groups. This is no doubt true; but it does not necessarily follow that we do not need more of some and less of others than formerly. If such groups had been well enough organized in the days of the Conestoga wagon, it might be with us yet. It is time to allocate our transportation resources on a more economical basis. If we insist on doing otherwise, at least we must not be disappointed with our efforts to obtain optimum coordination of transportation facilities.

Coordination within the general pattern of the existing framework calls for a number of fundamental changes in law and attitude, in conjunction with numerous minor revisions. Basic to any program of coordination is uniformity of regulation, or as much uniformity as the nature of the media will permit. It goes without saying that much more is permissible than is indicated by regulation now in effect. Basic to uniformity of regulation, however, is equitable promotional policy, and we shall begin our discussion around this focal point.

The transportation firms, whatever the media, have as an underlying basis for rate-making the concept of discriminatory pricing. They make no pretense of consistently treating economic comparables alike. It is good business from their standpoint, and the strengthened transportation system which results is said to benefit all. The public, too, in its policy toward transport firms follows a policy of discrimination. This discrimination also is probably capable of strengthening the transportation system, although it may not benefit all firms engaged in the business. But this type of discrimination, like discriminatory rates, may become undue or excessive, with the effect that it is more harmful than helpful.

It is unlikely that the public will soon give up its inclination to promote certain categories of transportation, especially the newer forms or those that serve well-organized groups. It is imperative, however, that these public aids be clearly isolated by amount and recipient, so that the hidden cost of transportation may become a matter of public knowledge. It is further necessary that the projects calling for public aid be coordinated, with a view to economy of effort and maximization of transportation facilities.

From a purely economic standpoint, all transportation should pay its own way. Where it is not feasible or economic for the transport firm to provide certain of its own facilities and the public authority must do so, the cost of the investment so

provided should be recovered through the imposition of user charges. The public, in a democratic society, may demand certain transportation services that are not, for one reason or another, capable of pricing at rates that would attract usage. In other words, the public may desire transportation for which it is not willing to pay the full cost as a direct corollary to the use of the service. The deficit is expected to be made up from the general revenues of the government. This subsidization of transport is especially prevalent with respect to new developments in transportation. Every form of transport has, at one time or another, been the recipient of varying amounts of public aid in its period of early development, and some have received payments into maturity. No transport concern, and no user group, ever voluntarily relinquishes such public assistance; but the economic use of resources requires that the need of transport forms for publicly-provided facilities and their ability to contribute a part or all of such costs in user payments be continually appraised, for unwise subsidization is a major factor in diversion of traffic from common carriers.

Either subsidies must be kept to a minimum, or consideration must be given to the subsidization of the entire system, including the railroads. Accordingly, it is suggested that the several governmental agencies now actively promoting the different forms of transportation should be combined into a single entity. Whether this agency should be combined in a single department which would also function in the regulatory field or be maintained as a separate division will be treated below; but, whatever its location, this department should be invested with the authority and responsibility for planning the development of the entire transport system. It is further suggested that careful analysis by this agency of the benefits to a balanced program of transportation should be made prior to the construction of facilities, and that consideration should be given to the development of a system of user charges where they do not now apply.

VI

UNIFICATION OF REGULATION

Comparable footing is mandatory for competition between carriers, and comparable treatment is, for that matter, desirable in its own right. The various segments of American transportation had their inception at different times, and this, coupled with the American custom of regulating as the need presents itself, has resulted in separate acts to regulate separate industries. As the segments become more fully developed, the varying treatment accorded the different media becomes less satisfactory. The time has come—indeed, it has long passed—to replace the diverse provisions with a more homogeneous application.

While much unification of treatment might be accomplished under the separate regulatory bodies now authorized, unified regulation requires unified control. An appropriate start to coordinated regulation would be the creation of a single agency of control. It might be objected that the single body would not have the high degree

of interest in any one medium of transport that the present boards have, but this is precisely the point. The degree of objectivity would be increased, and this is desirable. The ability of a single body to acquire the vast amount of knowledge required to administer all forms of transportation might also be questioned. The details of the operation of any one of the agencies are beyond the ken of any one individual, true, but the mastery of the principles of transportation and the general information required to comprehend the problems of the several forms of transportation is a less formidable task. The single regulatory agency will provide the base for an unprejudiced view of the over-all concept of transport which can be obtained in no other way.

Reference has already been made to the need for centralizing promotional policy and coordinating it, to some extent, with regulatory objectives. The Hoover Commission advanced a solution which would concentrate all general research and promotional activities under the direction and control of a governmental agency concerned with all of the major questions of transportation policy, and would retain separate commissions to perform the essentially regulatory functions.[17] Under such a system, the promotional agency would, in general, determine which promotional programs were necessary and justifiable. Consideration might be given to lodging with such an agency the determination of the over-all extent of the direct subsidy programs. If this were done, the regulatory commissions, as far as subsidies are concerned, would be restricted to determination of which parties should receive particular subsidies.

The multiregulatory-body approach would be rejected by this writer, but the other feature of the Hoover Commission's recommendation is worthy of consideration. The Commission was also on sound footing when it rejected the idea of a separate Department of Transportation. Its thought was that this might lead to the demand for departments for other major industries.

What are the ramifications of housing responsibility for major questions of transportation policy, including promotion, in a division of transportation and establishing a separate regulatory commission to function independently? Such a step means, first, that a comprehensive, but not inflexible, plan for transportation use and development may be formulated. This, in turn, means that competition is not to be relied upon as the prime allocator of resources to transportation; but competition has never been relied upon to the exclusion of other forces where transportation and public utilities have been concerned. The over-all plan will not preclude an aggressive effort by the management of the several media, in groups or alone, for increased efficiency and expanded markets, both for the firm and the industry. Second, the centralization of promotional policy means that a concise, coordinated program of public aids can be formulated and controlled, and the costs more accurately evaluated, ascertained, and apportioned—if this is felt desirable—to the proper beneficiaries. This means

[17] COMM'N ON ORGANIZATION OF THE EXECUTIVE BRANCH OF THE GOVERNMENT, DEP'T OF COMMERCE, A REPORT TO CONGRESS 11-25 (1949).

that the regulatory body, to a greater extent than at present, will be informed and aware of the extent and place of public aids in interagency conflicts and competition.

Mention is made above of the preference for an independent regulatory body. The fundamental basis on which this choice is predicated is the desire to preserve the impartiality of the commission, and to do this, the commission must be as free as possible from political interference from either administration or congressional sources. Even the so-called independent body can be subjected to political influences by the passage of unwise legislation or amendments to force action that the commission could not otherwise undertake in good conscience—the amendment of the Motor Carrier Act with respect to trip-leasing was a prime example of this[18]—but at least the activity is overt.

Unification of regulatory activity will not, in itself, insure comparable treatment and supervision of the several media of transportation, although it should lead in that direction. The acts themselves, and the parts thereof, must be aligned, in so far as the economic characteristics of the transport types will permit. This permits a considerable amount of flexibility in the revision, but it is anticipated that it will result in a minimum amount of inconsistency. Whether the emphasis is placed upon a maximum of competition with a minimum of regulation or a maximum of regulation with a minimum of competition, incomparable treatment of the separate modes of transport is indefensible.

VII

SOME IMMEDIATE STEPS

If the public and the government are not ready to accept a positive approach to the transport problem, either in the form of transportation companies or through comparable treatment of the separate agencies, a great deal of coordination is still possible under existing conditions. Slight changes in legislation could make possible still more. These potential areas of coordination are important not only because they may be effected, to some degree, in a short time period, but because such coordination would be required under more permanent solutions and is, therefore, a step in that direction. The coordination is of two types, intra-agency and interagency.

The railroads have developed intra-agency coordination to a higher degree than any of the other forms of transport. It is to them that we might first look as a model (not necessarily an ideal one) of what might be attained in the way of coordinated service involving a single medium of transportation. Over a long period of time, as a result of managerial decision and commission prodding, the railroads have developed an extensive network of through routes, established joint rates, evolved comprehensive car service rules for the interchange of equipment, and provided for joint use of terminals. The rails have also provided for the interchange of freight with water carriers and, in some instances, with other types of carriage. In the areas of through routes, joint rates, and interchange of equipment, the other carriers

[18] 70 Stat. 983 (1956), 49 U.S.C. § 304 (Supp. V, 1958).

have lagged noticeably behind the rail carriers. Much of the delay has been caused by the size of operations of the carriers and the characteristics of the equipment used.

A small or medium-sized trucker cannot afford to release a loaded trailer to another firm with the knowledge that he will be without its service for days or weeks, for it would handicap his ability to provide service over his own route. This inability to exchange trailers has been one of the major factors in retarding the development of coordinated motor carriage. The increasing use of leasing companies and the increased supply of equipment which this makes available will help to remedy this situation. In the latter part of 1958, 365 common carriers by motor vehicle formed the National Motor Equipment Interchange Committee to facilitate the increased interchange of motor trailer containers.

One factor that should have considerable impact on the ability of carriers to offer coordinated service is the increasing amount of consolidation proposed for motor carriers and for rail carriers. The barriers that impede the development of transportation companies do not exist in the same magnitude with respect to integration of like forms of transport.

Any economic coordination of transportation is desirable, and coordination of the services of like forms of transport is to be fostered; but it is still necessary that the transport system as a whole be more coordinated than at present, whether the coordination be a joint effort of the separate media or the decision of a company controlling more than one medium. Several examples of the coordination of separate media as a joint effort currently exist. One of these is the movement of air express, which is a joint venture of the airlines and railway express. Another is plan I piggyback—rail transportation of trailers owned by common motor carriers—which is one form of coordinating rail and motor service that is growing in popularity.

Piggyback, of which plan I is only one of several methods for coordinating rail-motor service by use of trailers on flat cars, is one of the most promising devices to coordinate the economic advantages of the flexibility of motor carriers with the over-the-road economy of rail. Improvements in the physical equipment used in the service, such as the flexi-van, plus the increased use of incentive rates to put more common motor carrier trailers on the rails, should bring accelerated usage. More experimentation is in order with respect to joint rates between rail and motor carriers, which would serve, in effect, to extend the territory of each carrier into that served by the other. A number of such agreements are already in effect.

Broader in scope is the present request of the Western States Movers' Conference for permission to admit rail and water carriers, which will join rates and through routes.[10] Much potential coordination of this sort has been hindered in the past by the fear by one carrier of strengthening another. There is some evidence that the desire for mutual profit is overcoming this misgiving.

An important development that may speed coordinated handling of freight between the several forms of transport is the advance made in the use of large-size

[10] Section 5a Application No. 39, ICC, Nov. 7, 1958, amending Western States Movers' Conference—Agreement, 288 I.C.C. 678 (1953).

containers, of which the truck trailer itself is one type—the most mobile type. With piggyback and fishyback, these containers may be exchanged readily between motor, rail, and water—and possibly air freight. In fact, this must be considered the most promising of all devices to promote physical coordination of the separate agencies.

Under existing regulation and philosophy, then, the very minimum in coordination of transportation calls for (1) continuing consolidation of like forms of transport; (2) increasing the number of through routes and joint rates requiring participation of unlike forms of transport, such as rail and motor, or motor and water, as well as increasing the number of through and joint routes of like forms of transportation; and (3) the interchange of equipment wherever possible to facilitate the service and economy of joint routes.

CONCLUSION

Coordination of transportation can range from a high degree of integration to a loose type of cooperation. The ultimate in coordination comes under the former circumstance. How much coordination can be expected depends upon the desire of the American public for coordinated transport relative to their desire to preserve separate, competing transport entities subject to varying degrees of regulation and public assistance. It is suggested, therefore, that there are several answers to the problem of transport coordination, depending upon the fundamentals of public policy toward the transportation system.

It is evident that the existing regulation is unsatisfactory in many respects. It is also apparent that the transportation system is not achieving its maximum economic potential. Expressions from industry and from congressional leaders indicate that the need for remedial action is recognized. This action has manifested itself in revision of the Interstate Commerce Act and the passage of the Federal Aviation Act, and further revision is indicated. As a minimum, we may expect a continuing patching of some of the most obviously inadequate or outdated provisions. As a maximum, greater reliance may be placed on competition, with a change in regulatory and promotional policy to effect it. Neither policy will provide a completely workable answer because of the nature of the transportation industry. The industry's characteristics will not permit more than a minimum amount of competition without undesirable aftereffects. On the other hand, regulatory control is made difficult by the heterogeneity of the carriers subject to jurisdiction.

The ultimate solution may lie in a change in the economic structure of the firms offering transportation service, which will eliminate interagency competition and provide a base for uniformity of regulation. A change of this sort would be most difficult to effect. Still, the transportation company has much to offer from a regulatory and economic standpoint. Further thought might well be given to the transportation company as a long-run solution to the transportation problem.

An intermediate solution may take either of two approaches, competitive or regulatory. Each would be predicated upon two premises. First, there would be com-

parable treatment of public aids for all forms of transport. Either user charges would be assessed on those receiving public aids or public aids would be extended to those currently not receiving any. Promotional policy would be comparable in any event and closely coordinated with the regulatory function. Second, the inconsistencies in the regulation of the several modes of transport would be removed, and uniform control would be exercised by a single, independent regulatory authority. These intermediate approaches would differ in that one would place major emphasis on competition as an allocator of resources among the several media of transportation; this would mean that the preservation of the individual competitors would be placed secondary to the maintenance of a vigorous competition between firms. The alternate intermediate solution would be based on the assumption that reliance on greater competition for transport allocation is unworkable because of the nature of the industry; competition would be permitted, but there would be no hesitancy about moderating it by regulatory action in both general and specific cases.

The least desirable, but most easily attained, solution is a continuation of existing laws, commissions, and policy, with only such amendment of particular areas as will be forced when the areas become troublesome or when there are shifts in attitude toward specific problems. Even within this framework, a great deal of coordination can and should be effected, on both an interagency and an intra-agency basis. Extension of through routes, joint rates, the interchange of equipment, and expedition of service should be promoted and encouraged, for they are beneficial to the transport firms directly concerned, to the shipping public, and to the maintenance of a vigorous transportation system.

RESTRICTIONS AGAINST RAIL ENTRY INTO OTHER TRANSPORTATION FIELDS

PETER T. BEARDSLEY*

When Congress provided for federal regulation of interstate motor vehicle transportation, it took steps to bar railroad entry into the field of unrestricted motor carriage. That policy, consistent with the basic antitrust philosophy expressed in the Sherman Act of 1890[1] and other federal antimonopoly statutes, was, and is, sound and should continue in effect.

On the Archives Building in Washington, D. C., are two inscriptions. One admonishes: "Study the Past"; the other informs that "What Is Past Is Prologue." A study of the past, it is submitted, will demonstrate vividly the need for protecting other forms of transportation from wholesale rail encroachment.

The railroads throughout the country, individually and through their associations, have for some years contended that they are the victims of an outmoded regulatory scheme and, as a result, are not able to render the quality of service of which they are capable, provided only that their "managerial discretion" were allowed free rein. All they ask, they say, is the opportunity fully and fairly to compete with other modes of transportation, including the privilege of owning and operating such other modes. Most of their ammunition, of late, seems to be directed at this latter target, referred to by them variously as "common ownership," "diversification," and lately as "one-package transportation." One of the commonest arguments made in support of the rail premise that they should be allowed free entry into other forms of transportation is the need for coordination in transportation service.

I

CONGRESSIONAL POLICY

There is ample opportunity for coordination of service under present transport laws. The Interstate Commerce Act authorizes joint-rate and through-route arrangements between different types of carriers.[2] Although the trucking industry stands ready to work with the railroads in the performance of coordinated rail-truck service, the railroads generally, with a few scattered exceptions, have followed a policy of refusing to enter into joint-rate and service arrangements with motor carriers. This refusal was at first the result of concerted action by the railroads that culminated in a series of resolutions adopted by the Association of American Railroads that

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[1] 26 Stat. 209, 15 U.S.C. §§ 1-7 (1952).

[2] 49 Stat. 558 (1935), 49 U.S.C. § 316(c) (1952).

forbade member roads from establishing joint rates with common carrier bus or truck lines. As a result of an antitrust action brought by the Department of Justice, however, these resolutions were rescinded; but the railroads, generally speaking, have continued to follow the policy which the resolutions established. It would be ironic, indeed, if the railroads were rewarded for their failure to enter into joint-rate and through-route arrangements with motor carriers by a change in the law that would permit them to own and operate all forms of transportation, with all the monopolistic vices inherent in any such scheme.

The policy against allowing common control of competing media of transportation was well-established long before interstate transportation by motor vehicle was brought under federal control. The Panama Canal Act of 1912[3] and the legislative debates thereon disclose a crystal-clear congressional intent to keep each form of transport independent of ownership or control by other forms. The report of the House Committee dealing with the legislation noted:[4]

> The proper function of a railroad corporation is to operate trains on its tracks, not to occupy the waters with ships in mock competition with itself, which in reality operate to the extinction of all genuine competition.

The above-quoted language was not merely the reflection of "ivory tower" thinking; rather it represented the view of practical men whose duty it was to advance the interests of the entire public in the regulation of transportation and whose experience with railroad operations up to that time motivated the passage of the law in question. Although the Panama Canal Act of 1912 absolutely prohibited rail control of water lines operated through the Canal, it allowed rail control of lines not so operated, if the "Commission shall find that the continuance or acquisition of such ownership . . . will not prevent such [water carrier] from being operated in the interest of the public and with advantage to the convenience and commerce of the people. . . ."[5] Shortly after passage of the Panama Canal Act, various railroads owning or having an interest in water lines operating on the Great Lakes filed petitions seeking the right to continue the relationship. In *Lake Line Applications Under Panama Canal Act*, the Interstate Commerce Commission said:[6]

> These boat lines under the control of the petitioning railroads have been first a sword and then a shield. When these roads succeeded in gaining control of the boat lines which had been in competition with paralleling rails in which they were interested and later effected their combination through the Lake Line Association by which they were able to and did drive all independent boats from the through lake-and-rail transportation, they thereby destroyed the possibility of competition with their railroads other than such competition as they were of a mind to permit. Having disposed of real competition via the lakes, these boats are now held as a shield against possible competition of new independents. Since it appears from the records that the railroads are able to operate their boat lines at a

[3] 37 Stat. 566, 49 U.S.C. § 5(14), (15), (16) (1952).

[4] House Comm. on Interstate and Foreign Commerce, *Operation of the Panama Canal*, H.R. REP. No. 423, 62d Cong., 2d Sess. 12 (1912).

[5] 37 Stat. 566, 49 U.S.C. § 5(16) (1952).

[6] 33 I.C.C. 699, 716 (1915).

loss where there is now no competition from independent lines, it is manifest that they could and would operate at a further loss in a rate war against independents. The large financial resources of the owning railroads make it impossible for an independent to engage in a rate war with a boat line so financed.

From a consideration of all the circumstances and conditions disclosed by the respective records herein, the Commission is of opinion and finds that none of the several existing specified services by water herein concerned is being operated in the interest of the public or is of advantage to the convenience or commerce of the people within the meaning of the act, and that an extension and a continuance thereof will prevent, exclude, and reduce competition on the great lakes, The application of each of the petitioners herein is therefore denied, effective December 1, 1915. An order will be entered accordingly.

By section 213 of the Motor Carrier Act of 1935 (now incorporated in section five of the Interstate Commerce Act),[7] the ICC was authorized to approve the acquisition of control of a motor carrier by another such carrier upon a finding that "the transaction proposed will be consistent with the public interest." However, the law provided that if the purchaser was "a carrier other than a motor carrier," the ICC was precluded from approving the transaction unless it would (a) "promote the public interest by enabling such carrier other than a motor carrier to use service by motor vehicle to public advantage in its operations," and (b) "not unduly restrain competition."[8]

In referring to these provisions of the law, those charged with the responsibility for the legislation in the House and Senate clearly indicated the congressional intent to maintain the independence of the newly-regulated industry. Mr. Sadowski, the Chairman of the Subcommittee of the House Committee on Interstate and Foreign Commerce, said:[9]

I will say in this respect that it is the intent, and it is important to the welfare and progress of the motor-carrier industry, that the acquisition of control of the carriers be regulated by the Commission so that the control does not get into the hands of other competing forms of transportation, who might use the control as a means to strangle, curtail, or hinder progress in highway transportation for the benefit of the other competing transportation.

Senator Wheeler, Chairman of the Senate Committee on Interstate Commerce, spoke in a similar vein:[10]

With this limitation, it will be possible for the Commission to allow acquisitions which will make for coordinated or more economical service and at the same time to protect the public against the monopolization of highway carriage by rail, express, or other interests.

It is interesting to note that Congress, by the Transportation Act of 1940,[11] removed any bar to the acquisition of a motor carrier by a water carrier, but continued in full force the restriction against rail operation of motor vehicles except in

[7] 49 Stat. 543, 49 U.S.C. § 5(2)(b) (1952).
[8] *Ibid.*
[9] 79 CONG. REC. 12206 (1935).
[10] *Id.* at 5655.
[11] 54 Stat. 898, 49 U.S.C. §§ 1 *et seq.* (1952).

what has come to be known as "auxiliary and supplemental" service. Here, it would seem, was recognition that although there was litttle danger that water carriers would be able to gain control of the motor-carrier industry, there was no basis for a similar assumption with respect to the vastly larger and far more financially-powerful railroad industry.

II

THE COMMISSION'S APPROACH

It is not the purpose of this article to discuss in detail all of the important court and ICC decisions dealing with railroad efforts to perform all-out trucking operations; reference to a few of them will suffice.

The landmark decision in this field is the so-called *Barker* case,[12] decided in 1936. There, a motor-carrier subsidiary of the Pennsylvania Railroad sought authority to acquire the operating rights of an independent motor carrier. Through the acquisition, the rail affiliate intended to perform two distinct types of motor-carrier operations. On the one hand, it proposed a service fully coordinated with that of its rail parent; on the other, it proposed to conduct operations completely divorced therefrom. The ICC, Division Five, refused to sanction the proposed purchase, and in so doing, it set forth its reasons in what has become the classic statement in support of the proposition that railroads should not be allowed to encroach upon the motor-carrier field:[13]

> While we have no doubt that the railroad could, with the resources at its command, expand and improve the partnership service and that, so far as numbers are concerned, there is now an ample supply of independent operators in the territory for the furnishing of competitive service, we are not convinced that the way to maintain for the future healthful competition between rail and truck service is to give the railroads free opportunity to go into the kind of truck service which is strictly competitive with, rather than auxiliary to, their rail operations. The language of section 213, above quoted, is evidence that Congress was not convinced that this should be done. Truck service would not, in our judgment, have developed to the extraordinary extent to which it has developed if it had been under railroad control. Improvement in the particular service now furnished by the partnership might flow from control by the railroad, but the question involved is broader than that and concerns the future of truck service generally. The financial and soliciting resources of the railroads could easily be so used in this field that the development of independent service would be greatly hampered and restricted, and with ultimate disadvantage to the public.

In a subsequent decision in the *Barker* case, the precise limits of rail operation of motor vehicles were spelled out:[14]

> Approved operations are those which are auxiliary or supplementary to train service. Except as hereinafter indicated, nonapproved operations are those which otherwise compete

[12] Pennsylvania Truck Lines, Inc.—Control—Barker Motor Freight, Inc., 1 M.C.C. 101 (1936).
[13] *Id.* at 111-12.
[14] Pennsylvania Truck Lines, Inc.—Control—Barker Motor Freight, Inc., 5 M.C.C. 9, 11-12 (1937).

with the railroad itself, those which compete with an established motor carrier, or which invade to a substantial degree a territory already adequately served by another rail carrier.

Thus, at the very outset of federal regulation of the motor-carrier industry, the ICC construed the governing statute as requiring it to insure against all-out truck operations by railroads, competitive with independent motor carriers and, indeed, with their own train service.

As noted, the *Barker* case involved a purchase application, bringing into play the specific statutory language of section 213 of the Motor Carrier Act of 1935, requiring, *inter alia,* a finding by the ICC that the rail applicant would "use service by motor vehicle to public advantage in its operations" before the purchase could be authorized. What about a so-called extension application by a railroad under section 207?[15] In other words, what if a railroad first purchased a motor-carrier operation subject to restrictions as required by section 213 and subsequently sought to have the restrictions removed by virtue of a section 207 proceeding? Although the express limitations contained in section 213 were not repeated in section 207, the ICC, in the leading case of *Kansas City Southern Transport Co., Inc., Common Carrier Application,*[16] held, in 1938, that the principles of the *Barker* case were equally applicable to section 207 proceedings.

Through the years, the ICC consistently has construed the law as requiring that rail operation of motor vehicles, except in a handful of cases—distinguishable and relatively unimportant[17]—be restricted to auxiliary and supplemental service, whether the service resulted from applications filed pursuant to section 213 or section 207. The only major exception to the requirement that railroads be limited to so-called auxiliary and supplemental trucking operations is the recent decision of the ICC in *Rock Island Motor Transit Co. Common Carrier Application.*[18] In that proceeding, the ICC held that the "special circumstances" of the case, the failure of the independent motor-carrier protestants to provide adequate service to the small Iowa communities involved, justified a grant of unrestricted authority to the rail-subsidiary applicant. Even so, the ICC made it clear that it was not abandoning its long-continued practice of restricting railroad truck operations to auxiliary and supplemental service when it said:[19]

> The findings hereinafter made are not to be construed as an abrogation of the policy established in *Kansas City S. Transport Co., Inc., Com. Car. Application.* . . . They represent an exception to that policy justified by the evidence in this proceeding. In other words,

[15] 49 Stat. 551 (1935), 49 U.S.C. § 307 (1952).

[16] 10 M.C.C. 221 (1938).

[17] The exceptions fall into three categories:

(a) Where the service is to a point not on the rail line, not adequately served by any other carrier, rail or motor. See, *e.g.,* Interstate Transit Lines Ext.—Verdon, Nebr., 10 M.C.C. 665, 667 (1938).

(b) Where the service is to be tacked to existing service already subject to appropriate restrictions. See, *e.g.,* Rock Island Motor Transit Co. Ext.—Wellman, Iowa, 31 M.C.C. 643 (1942).

(c) Where the truck service constitutes the major portion of the applicant's business, the rail service having become unimportant. See, *e.g.,* ET & WNC Transp. Co.—Control—The Inter City Trucking Co., 60 M.C.C. 620 (1954).

[18] 63 M.C.C. 91 (1954).

[19] *Id.* at 108.

such findings do not establish a precedent. Each case of this character must be determined upon the facts and circumstances disclosed by the evidence.

Thus, it is clear that the congressional policy, embodied in section 213 of the Motor Carrier Act of 1935, requires, except in special circumstances, that railroad-truck operations be limited to auxiliary and supplemental service, whether a particular application involves a purchase under section five or an extension subject to section 207. We turn next to the question of whether the law should remain as is, or whether its amendment to permit railroads to own and operate all facilities of transportation would be in the public interest.

III

Is Amending Legislation Needed?

The motor-carrier industry genuinely fears the possibility of unrestricted truck operations by railroads generally. This fear is based not on vague apprehension, but on concrete evidence of past rail activities which suggest that their tactics over the years have had but one objective: that of crippling their competitors by any means at hand, fair or otherwise. In 1941, the Senate Committee on Interstate Commerce, after an exhaustive investigation of railroads, holding companies, and affiliated companies, issued a lengthy report, which, among other things, noted:[20]

In one instance a transportation study, financed by a large railroad system and widely distributed in public schools, made no mention of the fact that railroad funds were behind it. Instead it gave the impression that it was the work of a Government-sponsored institution and hence an impartial survey. Another foundation, organized at the suggestion of railroad executives and financed in part by railroad treasuries, distributed its publications to hundreds of thousands of persons. Material in these publications was subject to the censorship of railroad officials and was characterized by them as "prorailroad" in its viewpoint. Nevertheless, this foundation described itself as an "independent organization" interested only in the "presentation of facts" and failed to reveal in any instance that it received financial and other support from railroads.

Another organization also presented itself to the public as a "neutral agency," an "unbiased association" and an "independent organization." Here again investigation disclosed that the organization was brought into being primarily through the railroads, was heavily financed by railroads, and was working to protect railroads from the competition of other forms of transportation and Government regulation. Directors of this organization were selected according to their "railroad attitude," and at least some of the so-called educational material it put out originated in the offices of railroad executives who frankly admitted that such material if sponsored openly by the railroads would be discounted as too biased.

. . . .

Railroads and railroad associations have spent large sums in lobbying for antitruck legislation. Seldom revealing their true role, they have worked "under cover" behind the fronts of taxpayers' groups, transportation associations, safety councils, and other organized groups. Among the measures thus secretly sponsored have been laws increasing taxes on

[20] Senate Comm. on Interstate Commerce, *Investigation of Railroads, Holding Companies, and Affiliated Companies*, S. Rep. No. 26, 77th Cong., 1st Sess. pt. 2, at 67-68 (1941).

trucks, limiting the size and weight of trucks and trailers, and tightening insurance and license requirements.

Enforcement of such legislation by railroads has been promoted by admittedly "deceptive" methods. Intricate spy systems have been set up to catch trucks and truckers in violation of the laws. One man subsidized by railroad funds disguised himself as a salesman of scales for weighing trucks. Another concealed his railroad connection by pretending that his major interest was in getting truckers arrested so that he could supply them with with bail bonds. One agent secured valuable information for the railroads as a representative of an "independent" weekly. Staffs of railroads were organized into a vast "intelligence system" for relaying information regarding truck movements. Rewards were offered to officers of the law to arrest truckers. Fictitious complaints from constituents were used in bringing pressure to bear on legislators. Material furnished free to newspapers and supposedly coming from a disinterested source gave wide publicity to the railroads' point of view. Research studies presented as the work of impartial engineers or taxpayers' groups, but actually financed by the railroads, purported to show the damage done to highways by trucks and the inadequacy of taxation on trucks.

In their legislative work the railroad associations have called on the staffs of railroads, chambers of commerce, shippers' groups, and many others to testify in behalf of the railroads and to urge action on legislators. In many instances such groups have been paid by the railroads for their services and have then urged their views on Congressmen as those of disinterested bodies unconnected with the carriers.

For those who think that the railroads have, in later years, adopted a more enlightened approach respecting the scope of competitive activities, a reading of the decision in *Noerr Motor Freight, Inc. v. Eastern Railroad Presidents Conference*[21] is recommended. Again, after exhaustive investigation, the United States District Court for the Eastern District of Pennsylvania issued a comprehensive opinion containing the following findings:[22]

1. That the rail defendants and Byoir, their public relations agency, "entered into a conspiracy in unreasonable restraint of trade, the nature and purpose of which was to injure the truckers in their competitive position in the long-haul freight industry in the northeastern section of the United States."

2. That the immediate purpose of the conspiracy "was to create public resentment to the truckers, not only in the minds of the general public but in the minds of those who utilized the services of the trucks and in such a manner as to interfere with business relations between shippers and truckers."

3. That the railroads "[i]nstead of meeting the [truck] competition in the field and giving the shippers what the shippers wanted . . . determined upon another course of action—to injure and/or destroy the truckers and thereby force the shippers to their detriment to continue to use the railroads."

4. That the actions of the railroads and their co-conspirators "destroyed to a large extent the public confidence which the truckers had earned by their own efforts and which they might have won additionally, especially in the light of the

[21] 155 F. Supp. 768 (E.D. Pa. 1957), *aff'd*, TRADE REG. REP. ¶ 69,546 (3d Cir. 1959).
[22] *Id.* at 809-11. The record in the case was comprised of over 6,000 pages and 968 exhibits.

innumerable beneficial accomplishments of the truckers in the field of long-haul transportation."

5. That "the evidence in this case clearly shows that, except for a small segment, the truckers are decent law-abiding citizens who obey the law, but as a result of this campaign they were categorized as law-breakers, road-hoggers, completely indifferent to the safety of others on the highway and moochers on the public through failure to pay their way."

6. That "overt acts to accomplish the objectives of this conspiracy were committed among others in the states of Connecticut, Indiana and Illinois. This feature is mentioned . . . to show that this was not a series of individual conspiracies but was one large evergrowing conspiracy with the single objective of 'improving the competitive position of the railroad in the field of transportation,' but by the illegal means of limitation of or destruction of the trucking industry."

When the experience of motor carriers with the rail competitive efforts disclosed by the cited Senate report and the *Noerr* case is considered, the trucking industry can well be expected to look with trepidation upon any change in the law which would permit railroads generally to engage in unrestricted truck service.

If the aim of the railroads were simply to *substitute* truck service for their train service and literally to abandon entirely their rail operations, that would be one thing. The trucking industry, having built, in many respects, a "better mouse-trap," would undoubtedly be able to hold its own with rail-operated truck lines. But any such assumption of railroad purpose is, of course, preposterous. The rails, having a net investment of over $27,000,000,000 in plant and equipment, could scarcely be expected to abandon that field. What then, would they do if they were able to conduct unrestricted truck operations throughout the length and breadth of their present systems?

It should be remembered that every pound of additional freight that railroads would handle in their truck operations would be freight that they would not handle in their train service. If all they seek to do is improve their over-all rail service by eliminating slow, local "way trains" and things of that nature, the present law, as administered by the ICC, affords them all the opportunities they need to put such practices in effect. So it must be assumed that once restrictions against all-out truck service were removed, the railroads would aggressively solicit vast tonnages of traffic to be moved in all-motor service operated by their subsidiaries. On the other hand, it seems plain that the railroads' ultimate objectives, because of their tremendous investment, is to get all traffic, or as much of it as possible, "back on the rails." In this connection, there is quoted below a revealing colloquy between Senator Purtell and D. B. Jenks, President of the Chicago, Rock Island, & Pacific Railroad, during the course of some recent hearings on problems of the railroads:[23]

[23] *Hearings Before the Subcommittee on Surface Transportation of the Senate Committee on Interstate and Foreign Commerce on Problems of the Railroads*, 85th Cong., 2d Sess. pt. I, at 588 (1958).

SEN. PURTELL. What I am trying to point out, sir, is that if we followed your suggestion, and the railroad companies were allowed to enter all fields of transportation, unencumbered by any special restrictions, then we would be likely to find that you are able to enter the trucking field, and you enter the air transportation—and that of course is a growing industry—and to the extent that you engage in that, to meet that type of competition, to that extent you reduce the importance of the railroads themselves in transporting goods in peacetime.

MR. JENKS. No, I don't think so at all because actually we would use it to bring more traffic to the rails, to get a better utilization of the railroads, to do the thing best that we can do best.

Thus, it would seem, the ultimate purpose of rail entry into the fields of other forms of transportation would be to reduce those other forms to the status of rail feeder lines, in order, as stated by Mr. Jenks, "to bring more traffic to the rails." This aim, however, could only be accomplished if the railroads were successful in reducing their independent motor, water, and air competitors to impotency. Assuming that "what is past is prologue" and bearing in mind the vast financial resources of the railroads, it can logically be expected that they would use their subsidiaries as "fighting ships" to eliminate or render ineffectual their independent competitors in the fields of nonrail transportation. Once this had been accomplished, the railroads could then proceed to their ultimate objective—"to bring more traffic to the rails" by using their subsidiaries as feeder lines.

The area reached by the railroads' lines, in the aggregate, is such that they would be able, by interchanging freight between their motor subsidiaries, to reach every point of any commercial importance whatever throughout the country. It seems reasonable to assume that the railroads, once they were permitted to perform completely unrestricted truck service, would, wherever possible, limit the interchange of traffic moving in their motor service to their own subsidiaries.[24] Since, at the present time, although the railroads freely interchange traffic with each other they generally avoid any interchange with motor carriers, it seems entirely unlikely that they would permit their subsidiaries to do otherwise.

Of course, the few rail subsidiaries which today can perform unrestricted truck service (largely as a result of having conducted such service prior to the passage of the Motor Carrier Act of 1935) do interchange traffic with independent motor carriers. But their reason for so doing is undoubtedly because only through such interchange can the shipments involved move in all-motor service, as desired by the shippers, from origin to destination. Once the present situation, where only a few rail-

[24] *E.g.*, in a proceeding in which the Great Northern Railway seeks the removal of all restrictions in its truck certificates which prohibit all-motor transportation between Williston, North Dakota, and points in Montana, and between designated points in the latter state, the hearing examiner's report notes: "For example, if the restrictions are removed, Burlington Truck Lines can originate traffic at Denver, transport it to Billings, on truck billing and at truck rates, and interchange it with Great Northern for delivery to such points as Great Falls, Havre, Shelby, and any other points now served by the Great Northern Railway." Great Northern Railway Co.—Modification of Certificates, No. MC-28573 (Sub.-No. 12), ICC, May 28, 1959. The "Burlington Truck Lines" referred to is the motor subsidiary of the Chicago, B. & Q. Railway Co.

roads have anything like extensive rights to perform all-out truck service, were changed to afford similar rights to all railroads, the independent motor carriers know full well that the railroads would make an all-out effort to restrict their interchange operations among themselves only. This would be accompanied by an equally intense effort to monopolize all the local motor traffic moving between points on the railroads' individual systems. These efforts, in turn, would be bolstered by an intensive rate-cutting campaign that would have as its purpose the removal of effective competition by independent motor carriers. It need hardly be argued that only the rail subsidiaries could long afford to handle large segments of traffic at less, or little more than, the bare-bones cost of providing the service and still continue as an effective instrument of motor transport. To paraphrase from the *Lake Line Applications* case: "The large financial resources of the owning railroads [would] make it impossible for an independent to engage in a rate war with a [motor] line so financed." If, despite their efforts to eliminate effective competition by rate-cutting activities, a few independent motor carriers remained on the scene, the railroads could undoubtedly, if they so desired, eliminate them through the simple expedient of buying them out.

CONCLUSION

The present transportation law imposes no obstacles to coordinated service supplied by independent agencies within the various modes of transport. History shows that, given the opportunity, the railroads have used control of other transportation media to drive independent carriers out of business and that their operation of such captive lines has been contrary to the public interest. Subsequent rail activities afford no reason for belief that the railroads would use unrestricted authority to conduct operations in other fields of transport for public benefit. If permitted free entry into the motor-carrier field, they could, and probably would, use their vastly superior financial power to underwrite rate-cutting activities, with the immediate objective of eliminating independent trucking operations, at the same time limiting interchange of traffic to their own motor subsidiaries. Once these efforts had succeeded, the rails would then be free to take the last step in their over-all program, the bringing of traffic "back to the rails" in order to protect their heavy investment in rail plant and facilities.

On more than twenty occasions since the passage of the Panama Canal Act in 1912, Congress has specifically considered the question of ownership of one mode of transportation by another. In each instance, Congress has rejected proposals which would allow such ownership. This is no time to turn back the clock. The present restrictions against rail entry into the fields of other forms of transport should be maintained—indeed, strengthened.

GOVERNMENTAL RESPONSIBILITIES IN THE FIELD OF LOCAL BURDENS ON RAILROAD TRANSPORTATION FACILITIES

DAVID I. MACKIE*

The recent business recession has brought into sharp focus the precarious financial situation of many of the country's leading railroads. Congressional hearings instigated by Senator Smathers in 1957 gave wide publicity to the progressive inability of rail carriers to produce sufficient revenue to meet their continually mounting expenses. The report[1] which followed those hearings particularly emphasized that a principal cause of this deteriorating situation was the astronomical deficits incurred, particularly by eastern railroads, in operating passenger services.[2] Heavy losses from rendering commuter and other local passenger service were specifically stated to have faced "several large carriers in the East . . . with the imminent threat of bankruptcy."[3] Hearings conducted at about the same time by the Interstate Commerce Commission on its own motion led to the submission of a proposed report which reached similar conclusions and ended with the prediction that the situation was so hopeless that most rail passenger service would be discontinued by 1970.[4] In the course of that report, the examiner referred to a study indicating that 18.5 per cent of the so-called passenger deficit[5] of Class I carriers throughout the country was attributable to commuter operations.[6] In the case of individual railroads serving large urban centers, the percentage is obviously much higher.

The threat which the situation poses to the continuance of commuter services has become a source of alarm in metropolitan centers, both to their patrons and to the communities in which they operate. The plight of the railroads providing such services in metropolitan areas is currently headline news, almost daily, in the public press. Recommendations for special city commissions, state commission, bi- and tri-state commissions, all attest the concern of the public and its officials and emphasize

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[1] STAFF OF SENATE COMM. ON INTERSTATE AND FOREIGN COMMERCE, 85TH CONG., 2D SESS., PROBLEMS OF THE RAILROADS, REPORT OF THE SUBCOMMITTEE ON SURFACE TRANSPORTATION (Comm. Print 1958).

[2] *Id.* at 3.

[3] *Id.* at 4. See also the statements of Messrs. Alpert, Perlman, and Symes in *Hearings Before the Subcommittee on Surface Transportation of the Senate Committee on Interstate and Foreign Commerce on Problems of the Railroads*, 85th Cong., 2d Sess., pt. 1, at 411, 227, 74, 144 (1958).

[4] Railroad Passenger Train Deficit, No. 31954, Examiner's Proposed Report, ICC, Sept. 18, 1958.

[5] The term "passenger deficit" refers to the amount by which the revenues from passenger-service operations fall short of covering operating expenses, taxes, and net rents assigned or apportioned to this service. *Id.* at 2-3.

[6] *Id.* at 18.

their conviction that "something must be done."[7] As stated by Governor Rockefeller, of New York: "We have passed the time for study. We have reached the time for action."[8] The seriousness of the problem has been proclaimed not only at the local governmental level, but also with compelling urgency at the federal level. The senate report above referred to states categorically that the commuter-service problem is[9]

> a matter of deep concern to the Federal Government because of the impact that losing commuter service can have on the ability of an interstate rail carrier to render its interstate service. . . . Because of the burden that these losing intrastate services are imposing on interstate commerce, the subcommittee feels that the Federal Government can no longer stand aside to the extent it has in the past.

Despite these expressions of concern, which might suggest possibilities of federal encroachment on private management or on the powers of local government, nearly all the recommendations which have been made presuppose that rail carriers must be kept operating under private management and, more importantly, that primary responsibility for action lies with the local communities affected. The senate report explicitly states that it is "desirable to leave to the local government agencies involved the job of seeking specifically tailored solutions to their particular problem."[10] That approach is regarded as eminently sound. It is, accordingly, the purpose of this paper to review two of the underlying causes of the problem, to examine one of them in detail, and to indicate the scope of its solution at the local level, together with the existence, and consequently necessary exercise, of federal power if local responsibility continues to be ignored.

At the outset, it is important to underscore the fact that transportation has always been a primary concern of government at every level. The reasons for that concern are obvious. Waterways and railroads were the means by which vast areas of this country were opened up, developed, and knit together into a nation. Today, those agencies of transport, together with the motor carriers and the air lines, are the means whereby raw materials and manufactured goods are moved from one part of our highly industrialized nation to another; railroads, airlines, buses, and private automobiles are the means by which people are transported about the country. Without this all-embracing, flexible transportation system, industry and agriculture would wither and die, national defense would become an empty phrase, and the mobility of personal life to which men and communities have become accustomed, and upon which they rely, would become impossible.

With the growth of population and expansion of our economy, government responsibility for transportation has necessarily both widened and deepened. In-

[7] *E.g.*, Baltimore, where the Greater Baltimore Committee recommended that a metropolitan transit authority be established to exercise effective supervision over all forms of transportation in the metropolitan area. Baltimore Sun, Jan. 22, 1959, p. 32, col. 4.

[8] Speech of Governor Nelson Rockefeller delivered before Republican Victory Dinner in Hotel Sheraton-Astor, New York City, Jan. 28, 1959.

[9] STAFF OF SENATE COMM. ON INTERSTATE AND FOREIGN COMMERCE, *op. cit. supra* note 1, at 4.

[10] *Id.* at 5.

creasingly, every section of the economy depends on some form of transportation to move not only freight, but passenger traffic. Specialization in industry has brought about progressively greater division of labor, which has intensified the need both for mobility and for coordination of the means which make that mobility possible. The continuing dispersal of population from urban and industrial centers is among the significant economic facts of our time. In consequence of this development, much of which has occurred since World War II and accompanied the new housing programs of the last decade, enormous numbers of men, women, and children have to be moved every weekday to and from industrial plants, offices, and schools. Mass transportation needs for such commuter travel has, therefore, become one of the most pressing responsibilities of state and local governments. Moreover, the threat which the use of alternate methods—notably the private automobile—poses to metropolitan centers in terms of parking, maintenance of streets and bridges, and traffic control is a source of increasing concern to city officials. In a recent speech made before a meeting of the mayors of principal American cities, specially assembled to consider the commuter problem, Mayor Wagner of New York stated:[11]

> If we allow mass transportation to deteriorate—indeed, if we don't help improve it—we place in possible jeopardy the economy of our metropolitan regions. . . . Mass commuter transit . . . constitutes an essential service, indeed a matter of survival, for metropolitan areas.

Notwithstanding this apparently growing concern at the local level for the future of passenger train service, doubt has been expressed as to what, if anything, state and local governments may be able to accomplish. A concurring opinion in the report of the New York Public Service Commission recently stated:[12]

> The problem of passenger deficits, even with respect to the New York railroads, is basically a national and not a state problem.

Traditionally, no doubt, the welfare of an over-all transportation system has been a responsibility of the federal government. Long ago, commerce ceased to be local and became national, with the result that Congress has, from time to time, gone to great lengths to promote particular forms of transportation. In the nineteenth century, rivers and canals, later railroads, received substantial government aid in the form, respectively, of appropriations and land grants. By the twentieth century, such benefits ceased to be conferred upon the railroads, but highways, waterways, and airways received, and are still receiving, enormous subsidies. Promotion of this kind has been accompanied by government regulation for the benefit both of the carriers and of the public. The public interest in safety, adequacy of service, and reasonable rates resulted in the enactment of such regulatory acts as the Interstate Commerce

[11] Statement by Mayor Robert F. Wagner on commuter transportation before a conference of a group of mayors of major cities and representatives of eastern and western railroads, Chicago, Ill., Jan. 13, 1959, N. Y. Times, Jan. 14, 1959, p. 1, col. 1.

[12] PUBLIC SERVICE COMM'N, REPORT OF INVESTIGATION OF THE FINANCIAL CONDITION OF THE RAILROADS OPERATING IN THE STATE OF NEW YORK 61 (1959).

Act in 1887,[13] the Motor Carrier Act in 1935,[14] the Civil Aeronautics Act in 1938,[15] and the Water Carrier Act in 1940.[16] Mindful of the competitive conditions under which transportation is conducted, Congress enacted in 1940 a declaration of policy to the effect that rail, highway, and waterway transportation subject to the Interstate Commerce Act, as amended, should be so regulated as to recognize and preserve the inherent advantages of each mode of transportation within the framework of fair and impartial regulation and to foster sound economic conditions.[17]

The national importance of transportation has also meant that the federal courts as well as Congress have been prompt not only to promote it, but to remove impediments placed in its path by state and local governments. As early as 1824, the Supreme Court, in *Gibbons v. Ogden*, turned to the commerce clause of the Constitution to strike down restrictions imposed by a state on interstate commerce.[18] In the *Minnesota Rate Cases*, in 1913, the Supreme Court made it plain that state control over intrastate rates was to be subordinated to federal regulation of interstate rates whenever the two conflict.[19] And in 1914, in the *Shreveport Cases*, the Court held Congress could authorize the ICC to remove discrimination against interstate commerce by prescribing a change in intrastate rates which were so low as to cause discrimination.[20]

Unquestionably, therefore, the federal government has not only the power, but an ultimate responsibility to oversee the welfare of intrastate as well as interstate transportation. That responsibility will undoubtedly be exercised if the units of local government primarily concerned do not act in time.

I

THE PATTERN OF DISCRIMINATION

Among the causes of current railroad difficulties brought out in the 1958 congressional hearings were those resulting from the vast subsidies which the railroads' competitors receive from the federal and state as well as local governments. Some 28,000 miles of navigable inland waterways, dams, locks, and channels, as well as seacoast and harbor improvements, are provided without cost to commercial users.[21] In fiscal 1959 alone, federal aid for highway construction and improvement was authorized in the amount of nearly $3,500,000,000 for the benefit of private automobile and commercial users.[22] Extensive payments and subsidies are likewise made to airlines and airway systems and for the construction and maintenance of airports and navigation facilities. According to announced plans, a total of $2,800,000,000 is to

[13] 24 Stat. 379, 49 U.S.C. §§ 1 *et seq.* (1952).
[14] 49 Stat. 543, 49 U.S.C. §§ 301 *et seq.* (1952).
[15] 52 Stat. 977, 49 U.S.C. §§ 401 *et seq.* (1952).
[16] 54 Stat. 929, 49 U.S.C. §§ 901 *et seq.* (1952).
[17] 54 Stat. 899 (1940), 49 U.S.C. note preceding §§ 1, 301, 901, 1001 (1952).
[18] 22 U.S. (9 Wheat.) 1 (1824).
[19] 230 U.S. 352 (1913).
[20] Houston & Texas Ry. v. United States, 234 U.S. 342 (1914).
[21] Mackie, *The Necessity for a Federal Department of Transportation*, 8 J. PUB. L. 1 (1959).
[22] *Id.* at 25.

be spent for airways facilities and services in the period 1959-63.[23] The federal government has already contributed over $1,000,000,000 for the construction of civil airports.[24] A bill has been enacted by the Eighty-sixth Congress to extend for a further four-year period the federal airport-grant program that expired on June 30, 1959. Authorized federal aid for this period totaled $297,000,000.[25]

No subsidies are available to the railroads. The result of these activities of the federal government, therefore, has been to effect substantial reductions in the operating costs of water, air, and motor carriers, which are consequently in a position to establish rates and fares which divert traffic from the rails. These competitive inequalities must be corrected, or continued financial deterioration of the railroads, and even bankruptcies, may be anticipated. While this situation is one of which Congress has become aware, much corrective action is still required. Current, carefully circumscribed proposals to create a Federal Department of Transportation, in which the Government's promotional activities with respect to all forms of transportation would be centered and coordinated, could provide much needed relief in this area.[26] Similarly, the study presently being conducted by the Secretary of Commerce, as directed by the President,[27] likewise holds hope of indicated solutions.

These difficulties at the national level, however, are matched by like difficulties arising out of competitive inequalities fostered at the state and municipal levels. Here, again, substantial subsidies are provided the railroads' competitors, but at these levels, the problem of competitive inequality is compounded by the heavy and discriminatory taxes imposed on rail carriers. Direct aid is provided to the railroads' competitors—water, motor, and air carriers—in the form of port, highway, and airport construction, paid for out of general public funds. Indirect aid, in the form of tax relief and tax exemption, has relieved those competitors from substantial operating costs, with the result that they are enabled to charge artificially low rates, which, in turn, diverts traffic from the rails. No such direct or indirect aid is afforded the railroads. On the contrary, they are not only mercilessly taxed by almost countless local authorities, but tax-free, publicly-built express highways and tunnels encourage the railroads' patrons to resort increasingly to the private automobile for transportation. The staggeringly high costs of doing business under such conditions of competitive inequality and of continuing attrition of traffic have reached the point at which progressive curtailments and abandonments of passenger services are inevitable unless remedial action is taken. Absent such action, these discontinuances will have their greatest impact on the one type of service most urgently needed by local communities—high-speed, efficient rail commutation service.

[23] *Id.* at 26.
[24] *Id.* at 27.
[25] 73 Stat. 155 (1959).
[26] Mackie, *supra* note 21, at 38.
[27] *Budget Message of the President*, in U.S. BUREAU OF THE BUDGET, *op. cit. supra* note 25, at M-5, M-46.

It must not be supposed that the provision of operating facilities and tax exemptions to the railroads' competitors, and the exaction of exorbitant taxes on rail plants and facilities are the only burdens which are imposed upon railroads at the local level. Curtailment of intrastate services and the authorization of fare increases are within the jurisdiction of state commissions which have frequently been reluctant to afford even the most imperatively needed relief.[28] The serious implications of the failure of some state commissions to grant needed relief in these areas led in 1958 to the invocation of federal power through addition of a new section 13a to the Interstate Commerce Act.[29] No relief has yet been afforded from either the local burdens of competitive inequalities or of tax assessments. It is in these areas that relief is most urgently needed. Indeed, both the report of the senate committee[30] and the examiner's proposed report[31] emphasized the impact of those burdens upon rail carriers.

Each of these two types of local burdens—competitive inequalities and tax assessments—that fall with staggering incidence on the railroads is of tremendous significance. The tax burden is particularly heavy in certain jurisdictions. The cost of local government has risen greatly in the last twenty-five years not only because of increasing wages and salaries, but because of citizens' demands that government continually expand its services and functions. Taxes have been increased and multiplied, and they have fallen most heavily on companies, like the railroads, which have enormous fixed plants sprawled across the face of the countryside and are subject to almost countless local taxing authorities. As public utilities, having relatively fixed incomes and being unable freely to raise their rates and charges to meet increasing taxes and other costs, their margin of profit can quickly become a margin of deficit. Figures in the recent report of the New York Public Service Commission[32] bring this point into formidable relief. The forty-seven railroads operating in New York State pay real estate taxes in the state to 1142 cities, towns, and villages[33] in fifty-seven counties,[34] exclusive of the City of New York, and, in addition, pay taxes based upon real estate to some 5000 school and special districts throughout the state.[35] The New York Central Railroad alone is subject to tax by more than 2700 individual taxing agencies in the state.[36] The burden of these taxes is demonstrated by the fact that while "between 1955 and 1957 the combined net income of the State's railroads dropped from $165 million to $76 million, or 53.9%; in the same period their real property tax bill *increased* from $38.9 million to $42.5 million, or 9.3%." The total

[28] STAFF OF SENATE COMM. ON INTERSTATE AND FOREIGN COMMERCE, op. cit. supra note 1, at 13.

[29] 72 Stat. 571, 49 U.S.C.A. § 13a (Supp. 1958). See Great Northern Ry. Co.—Discontinuance of Service, No. 20348, ICC, Feb. 6, 1959; New Jersey v. United States, 168 F. Supp. 324 (D. N.J. 1958), *aff'd*, 359 U.S. 27 (1959).

[30] STAFF OF SENATE COMM. ON INTERSTATE AND FOREIGN COMMERCE, *op. cit. supra* note 1.

[31] Railroad Passenger Train Deficit, No. 31954, Examiner's Proposed Report, ICC, Sept. 18, 1958.

[32] PUBLIC SERVICE COMM'N, *op. cit. supra* note 12, at 10, app. 12.

[33] *Id.* at 14.

[34] *Id.* at 89, app. 23.

[35] *Id.* at 14.

[36] *Ibid.*

taxes paid by these railroads in 1957 to the State of New York and its various taxing agencies amounted to $45,100,000.[37]

The plight of the railroads which operate in the State of New Jersey, particularly those which provide extensive passenger services, has become a subject of almost daily comment in eastern newspapers. The acuteness of the situation arises from the fact that New Jersey imposes on rail carriers a franchise tax and four types of property taxes. The franchise tax is a ten per cent tax on that portion of the carrier's net railway operating income which is attributable to New Jersey, which is arrived at through a formula of the ratio of total track miles in New Jersey to total system track miles; the property taxes are made up of levies upon four classes of property.[38] Each tax is, by itself, a standard type in common use. However, when combined, these five taxes have, over the five-year period from 1953 to 1957, cost the eleven Class I railroads operating in New Jersey an average of $2.65 for every dollar of net income earned in that state; and in the year 1957, the latest year for which figures are available, the cost was $3.58.[39] Figures based upon net operating income for particular railroads reveal, for example, that in 1958, the Pennsylvania Railroad paid out $5,829,976 in taxes, although earning only $702,180 of net operating income allocated to New Jersey on the basis of that state's own formula; and the New York Central Railroad paid out $1,562,205 in taxes, although earning only $78,252 of net operating income so allocated to New Jersey.[40]

If the combined taxes levied on a carrier by one state exceed the earnings properly attributable thereto, the carrier must draw upon and deplete its earnings elsewhere in order to pay the tax bill of a single state. Quite obviously, if every state in which an interstate railroad operates exacted taxes on a similar basis, insolvency could easily result. If, for example, the New Jersey basis were extended into all states in which the Pennsylvania Railroad operates, the total system taxes would be $97,416,000, as compared with their present level of $31,442,000.[41]

New Jersey has the distinction of leading all the States in the amount of taxes per mile of road which it levies against railroads. Its toll in 1956 was $10,244 per mile, which was more than 5 times the national average. The railroads have a long-standing grievance against the New Jersey taxing authorities for assessing their property at 100 per cent of value and recognizing a lower basis for other taxpayers. The State Supreme Court has found that the railroads have a just cause of complaint but various administrative pretexts have been employed to perpetuate the injustice.[42]

[37] *Id.* at 15.

[38] N.J. STAT. ANN. §§ 54:29A, 54:29A-14 (Supp. 1958) (franchise tax); *id.* § 54:29A-17 (Class I, II, and III property tax applicable to main stem, other real property used for railroad purposes, and tangible personal property, respectively); *id.* § 54:29A-4 (all property not used for railroad purposes assessed and taxed in the same way as other local property).

[39] ICC ANN. REP. (1954-58); N.J. DEP'T OF TREASURY REP. (1954-58).

[40] Computations based upon those used in Tax Statement, Assessment after Review by the Director, Division of Taxation, Department of the Treasury, State of New Jersey.

[41] Calculation supplied by the Director of Taxation of the Pennsylvania Railroad Company.

[42] Railroad Passenger Train Deficit, No. 31954, Examiner's Proposed Report, ICC, Sept. 18, 1958, p. 46, citing Delaware, L. & W. R.R. v. Neeld, 23 N.J. 561, 130 A.2d 6 (1957).

It may also be noted that the State of New York has the similarly dubious distinction of taxing the railroads operating within its boundaries at three times the national average.[43]

A few years ago, the Pennsylvania Railroad was required by the New Jersey Public Utility Commission to install moving stairs in its passenger stations at Trenton and New Brunswick, costing respectively $186,000 and $90,000. The taxing authorities thereafter increased the assessments on the station properties which included these facilities and thereby raised the annual taxes on those facilities in the amounts $3,926 at Trenton and $1,248 at New Brunswick.[44]

The New Jersey tax situation, though presently unique, is emphasized because that situation is one that appears to be gradually and relentlessly approaching in other jurisdictions. For example, Mr. A. E. Perlman, President of the New York Central System, testified before the Subcommittee on Surface Transportation at the 1958 hearings that from 1954 to 1955, the New York Central's taxes on the passenger bridge over the Harlem River, in New York City, were multiplied 700 per cent, from $70,000 to $490,000 a year, and the franchise tax for the right to use the underground tunnel into Grand Central Terminal jumped from $1,050,000 a year to $2,500,000 a year.[45]

At the same hearings, Mr. John Budd, President of the Great Northern Railroad, pointed out that in School District No. 7 of Lincoln County, Montana, the railroad pays 91.38 per cent of all school taxes levied in the entire district, even though the railroad's 265 acres, consisting only of main line trackage and a single siding, constitute but 0.335 per cent of the 79,200 acres in the district.[46]

None of these taxes, taken singly, might be found to burden commerce, however much they may burden a particular railroad; but the steadily mounting total tax burden is not only impairing the financial stability of rail carriers, but is making it impossible for them properly to perform their interstate business. Thus, the problem is not merely one of preventing multiplicity of taxes, but of reducing the total tax burden in a single state and, more importantly, of lightening the combined, cumulative burden of taxes in *all* states. The existing situation obviously presents an alarming threat to the solvency of rail carriers and, in addition, to the public interest in the continuance of sound and efficient rail transportation.

State and local tax rates on railroads are not only staggeringly large in the aggregate; many of them are also discriminatory. In New Jersey, for example, railroads pay a franchise tax at a higher rate than general business corporations.[47] Other states also impose taxes at rates which are unduly discriminatory to railroads, as contrasted with other types of businesses: for example, the Ohio excise tax of four per cent on all intrastate gross earnings, and the West Virginia transportation tax of

[43] ICC, BUREAU OF TRANSPORT ECONOMICS AND STATISTICS, SEVENTIETH ANN. REP. ON TRANSPORT STATISTICS IN THE UNITED STATES FOR THE YEAR ENDED DEC. 31, 1956, at 69, table 107 (1957).

[44] Railroad Passenger Train Deficit, No. 31954, Examiner's Proposed Report, ICC, Sept. 18, 1958, p. 46.

[45] *Hearings, supra* note 3, pt. 1, at 229. [46] *Id.* at 455.

[47] N.J. STAT. ANN. §§ 54:29A-13, -14, -15; 54:10A-5 (Supp. 1958).

four per cent on taxable net income allocated to the state together with a surtax which amounts to thirty per cent of the normal tax.[48]

Local valuations as well as local tax rates are also frequently discriminatory. In several states, notably in New Jersey and New York, the valuation placed upon railroad properties is higher than that upon other types of business. In New York, for example, the New York Central Railroad discontinued its car repair shops which were carried on the tax rolls of West Albany at $1,500,000. The railroad was unable to sell the property for more than $500,000, and when the new owner took possession, the assessment was lowered to $300,000.[49]

Discrimination by local communities against rail carriers is not confined to taxation. Every year, local communities are constructing facilities for competitors and freeing them of taxes. Thus, for example, Boston's Logan Airport was built with funds provided by the federal, state, and city governments at a cost of more than $74,000,000. Those payments were financed from funds to which the general taxpayer, including the New Haven, the Boston & Albany, and the Boston & Maine Railroads, of course, contributed. In addition, the 2000 acres (more than three square miles) occupied by the airport for the benefit of air travelers were freed of taxes, which thus had to be levied upon other properties, including those of the railroads. By contrast, the South Station in Boston, built and maintained by private railroad capital, occupies a mere thirty-one acres but is required annually to pay out of the revenues of the New Haven and Boston & Albany Railroads taxes in excess of $1,000,000.[50] This means that, since the expenses of those railroads are reflected in their fares and charges, rail passengers are helping to subsidize air passengers and, in addition, are paying disproportionate shares of their fractional contributions to city taxes. Moreover, to the extent that rail passenger services are operated at a deficit, in fact a substantial part of the air passenger subsidy is paid for out of revenues derived from freight shipments.

Comparable situations exist in other cities. For example, the City of Toledo, Ohio, completed its Express Airport in 1955 at a cost of $3,865,228 out of city funds to which railroads serving the city contributed along with other taxpayers. Owned and operated by the city, this airport pays no taxes and is, in fact, operated at a deficit. These operations, including the deficit, are financed out of city funds to which, again, the railroads contribute. By contrast, five years previously, the local chamber of commerce filed a complaint against the New York Central Railroad, alleging discrimination in failing to build a new station, and thereby forced that railroad to provide a new station, out of railroad funds, at a cost of $4,856,745. The property is taxed at over $40,000 a year.[51]

[48] OHIO REV. CODE ANN. §§ 5727.01-5727.62; (Page 1954); W. VA. CODE ANN. §§ 958(17)[5], 958 (17a)[5a] (Cum. Supp. 1958).

[49] Albany Times Union, May 24, 1958, p. 4, cols. 1 and 2.

[50] Testimony of Hollis H. Coyle, in Railroad Passenger Train Deficit, No. 31954, ICC, March 20, 1958, item 11, at 2, 3.

[51] Testimony of J. S. Gallagher, Jr., *id.*, April 7, 1958, item 10, at 5, 6; April 8, 1958, item 11, at 11.

It is clear from these examples that these high local taxes which the railroads are forced to pay are frequently the result of assessments upon passenger facilities, which nearly everywhere are operated at a loss. This is particularly true of facilities that are used for the suburban commutation services incurring enormous deficits. Thus, the New York Central, New Haven, and Pennsylvania Railroads paid the City of New York $9,700,000 in real estate and franchise taxes on Grand Central Terminal and Pennsylvania Station, together with their supporting coach yards.[52] Annual taxes on the station facilities and the first five and one-half miles of its track out of Grand Central Station amount to more than seventeen per cent of total franchise and property taxes assessed against the entire 10,700-mile New York Central System.[53] By contrast, the Port of New York Authority, in lieu of taxes, pays the City of New York only $450,000 a year rental for LaGuardia and Idlewild International Airports. On the basis of local assessment rolls, these two facilities would, if privately operated, be required to pay taxes to the City of New York approximating $7,268,000 annually.[54]

Railroads are thus not only overtaxed and taxed disproportionately, but they are discriminated against in favor of competitors. In addition, neither those competitors nor their patrons pay their fair share of user charges for facilities provided by state and municipal authorities, with the result that those charges are borne by the general public, including, of course, the railroads. The user subsidy provided to patrons of the airports in the New York City area is particularly striking. Helicopter service from Idlewild International Airport to the Port Authority Heliport is available at $7.00 plus tax. In 1957, the federal government paid the airline furnishing that service a subsidy equivalent to $3.08 for each $1 of passenger revenue earned. That amounted to $21.56 on each $7.00 ticket.[55] Again, Westchester County's Airport is maintained in part by the county for the use of two small airlines and for the executive planes of fifty-six large private corporations. Yet, the residents of the county willingly contribute thereto but oppose any contributions to the surburban service of the New York Central and New Haven Railroads, which carry tens of thousands of persons to and from New York every day.[56]

The inadequacy of user charges at the local level is especially conspicuous in the case of highways. The trucking industry moves enormous highway freighters over state-built and state-maintained public roads which are financed in large measure both out of general tax funds, to which the railroads contribute, and out of vehicle and gasoline taxes, to which the private motorist makes substantial contributions. Thus, the trucks have not one, but two completely artificial competitive advantages over the railroads: on the one hand, the rights of way on which they operate are

[52] *Id.* at 38.

[53] Figures supplied by J. S. Gallagher, Jr., Director of Passenger Research, Forecasting and Controls, New York Central System.

[54] Testimony of J. S. Gallagher, Jr., in Railroad Passenger Train Deficit, No. 31954, ICC, April 8, 1958, item 11, at 36.

[55] NEW YORK AIRWAYS, INC., 1957 ANN. REP. (1958).

[56] Speech of A. E. Perlman, before Westchester County Association, Nov. 25, 1958.

provided and maintained largely out of funds supplied by the general taxpayer and other highway users rather than out of user charges fairly assessed against them for their share of highway use; on the other hand, those rights of way are entirely free of taxes. By contrast, the railroads have built and currently maintain their rights of way out of their own, rather than out of public, funds; and they pay full taxes upon those facilities. In consequence of the situation, trucking companies have lower operating costs than railroads and can reduce their charges for moving numerous types of traffic below the level of railroad charges. In this way, not only is traffic diverted from the railroads, to their continuing financial loss, but the general taxpayers foot the bill for the difference between what the trucks do charge and what they would have to charge if user charges and taxes on their highway facilities were assessed against them.

II

REMEDIAL ACTION

Although there are indications that increased state gasoline and weight-distance taxes may bring about more fairly apportioned user charges and thus help to relieve the railroads of one of the presently existing inequalities of the rail-truck competitive situation, it is unrealistic to suppose that either the states or their municipalities would consider direct payments for the construction, improvement, or maintenance of rail facilities to match those made for air, highway and water facilities. It is also unrealistic to suppose that highway, airport, and water facilities could be subjected to state and local property taxes in order to bring about fair conditions in the tax area. Nevertheless, equality in that area can logically and realistically be achieved by freeing from *ad valorem* and in lieu taxes *all* railroad rights of way and terminal facilities. The tax exemption which has always been, and is currently, afforded highways, waterways, and airways reflects a policy that the "highways of commerce" should be free of taxes; and, surely, the railroads are as entitled to the benefit of that concept as are their competitors. This proposal, it must be emphasized, is based upon entirely different considerations from those involved in the exaction of fair user charges for facilities provided air, water, and highway users at public expense. User charges are designed and assessed in order to pay for construction, maintenance, and administrative costs of publicly-provided transportation facilities. *Ad valorem* and in lieu taxes, on the other hand, are assessed to pay for the general costs of government. If such taxes are to continue to be employed to support air and highway transport, they should be used for the benefit of all forms of transportation. It is as unfair and as illogical to require railroads to continue to help subsidize their competitors as to require that railroads be subsidized by their competitors. Equality can be attained only by treating alike all forms of transportation.

Proposals looking toward less comprehensive relief in the field of taxation have recently been advanced. Thus, a spokesman for the Chicago railroads recently stated it to be their position that taxes on railroad property should be "non-discriminatory

and bear a realistic relationship to earning power."[57] The New York railroads, on the other hand, are currently supporting exemption from taxation of all real property used in connection with railroad *passenger* service.[58] Although both of these objectives are sound, and while their accomplishment would doubtless to some degree alleviate the current financial problem, it is submitted that correction of the evil requires more drastic as well as more comprehensive treatment. If our national policy is to continue to exempt from *ad valorem* and in lieu taxation the "highways of commerce" other than those used by railroads, as it assuredly is, then equality of competitive opportunity can only be achieved by exemption from *ad valorem* and in lieu taxation of rail "highways of commerce." The principle should be applied to all rail transportation facilities—be they passenger or freight. No distinction as to use applies in the case of highway, waterway, or air facilities, and none should apply to rail facilities.

Suggestions have been made that the passenger deficit problem should be resolved by government subsidies at the federal level. Certainly subsidies are nothing new in American government. Direct subsidies to mining and agriculture are accepted features of every national budget, as are grants-in-aid made every year to the several states. Indirect subsidies through tariffs are almost as old as the Republic. More recent forms of indirect subsidies include income tax benefits and fast depreciation write-offs for certain types of industry. It is conceivable that Congress might decide to subsidize the railroads as it has the feeder airlines. Federal subsidies, however, especially in the public utility field, are unpalatable to many people who fear therefrom progressive governmental interference in private enterprise. It is, therefore, more realistic, and probably more sensible, to suggest that local communities, which have a primary responsibility for local conditions, undertake to equalize at least the local competitive conditions under which all forms of transportation operate. Because of the manner in which railroad transportation has developed—that is, initially financed out of private capital—it seems unlikely that local communities would favor outright payments to railroads designed to match those paid out for building airports and highways. Tax exemption for the railroads, however, is a different matter, because it would merely extend tax exemptions now accorded the railroads' competitors in a manner to bring about tax equality. *Equality of taxation is not subsidy.*

It is essential that the problem of local burdens on rail carriers be viewed from the standpoint of public need for continuing adequate transportation service rather than from the standpoint of classical tax concepts. Typical of the attitude of local taxing authorities is the position that railroads must be taxed like other industries. Characteristically, these authorities argue that any industry that loses money is no less subject to property taxes and that the losses or costs of doing business must fall upon the owners of that business. It is also argued that property which is totally

[57] C. M. Roddewig, President, Association of Western Railways, Press Release, Jan. 13, 1959.
[58] See S. 1030, Ass. 1378, N.Y. (1959).

unproductive—such as a vacant building—is always subject to taxes. The answer to these arguments is that a private industry, when losing money, can raise its prices, sell its property, reduce the scope of its activities, or liquidate its business. Likewise, a vacant building, if sufficiently unproductive, will be sold or torn down. A railroad cannot sell or destroy its plant; neither can it raise its prices, abandon its services, or liquidate its business—short of bankruptcy proceedings—without the consent of state or federal regulatory bodies. These characteristics of the railroad business provide the key to the problem: railroads are utilities affected with a public interest which is so paramount that almost from the beginning they have been, and continue to be, subject to regulation by government. The concept of regulated industry carries with it numerous legal consequences which either displace or substantially modify both the law of the market place and many traditional legal concepts. Not only is it not in the public interest, but it is wholly contrary to and at variance therewith to provide railroads, faced with mounting passenger deficits attributable in substantial measure to local taxes and subsidies, with only one option: that of bankruptcy.

That some solution must be found for alleviating rail carriers' burdens resulting from high taxes and the inequalities of competitive opportunity imposed and fostered by state and local governments is obvious to any one who does not wish to see nationalized the railroads and eventually other forms of transport. The continually increasing impact of such burdens are slowly, but very surely, crippling the railroads' financial welfare and destroying their capacity to render essential services. The fact that improved service and reasonable financial well-being can result from the alleviation of local tax burdens is brought out by the record of the Long Island Rail Road Company after the enactment of legislation providing a ceiling on real property taxes levied against railroads which qualify as railroad redevelopment corporations. That legislation not only enabled the Long Island to emerge from bankruptcy and to continue operations under private management, but enabled it to embark upon a $65,000,000 improvement and modernization program which made it possible to provide increased service and comfort for the commuting public.[59]

That experience forcefully demonstrates that relief from problems created at the local level can also be solved at the local level. There are signs that other local communities are prepared to take action in certain directions. In 1958, the Massachusetts legislature voted a direct subsidy of nearly $1,000,000 in order to keep running the Old Colony Line of the New Haven Railroad.[60] In that year, also, the Pennsylvania and Reading Railroads concluded a novel arrangement with the Philadelphia Transit Company and the City of Philadelphia whereby the latter allocated $160,000 to reimburse the two railroads for out-of-pocket costs in connection with increased commuter service meshed to the bus schedules of the P.T.C.[61] In New Jersey, a state commission has been created to deal with and resolve the railroad passenger

[59] See testimony and appendices thereto of Thomas M. Goodfellow, in Railroad Passenger Train Deficit, No. 31954, ICC, 1957 item 8.

[60] Mass. Acts 1958, ch. 541.

[61] See Philadelphia Inquirer, Feb. 20, 1959, p. 4, col. 4.

problem;[62] and in New York, Governor Rockefeller has recommended,[63] and the legislature has enacted, legislation[64] to create a State Office of Transportation to address itself to "the most critical of our present transportation problems . . . that of our commuter service." Only last year, in 1958, Governor Harriman, of New York, approved a bill providing that any tax district in New York would be authorized to agree with a railroad corporation to exempt it, in whole or in part, from taxation of its real property.[65] Such actions, however, are only straws in the wind and hardly come to grips with the heart of the problem.

Unless far-sighted statesmen are prepared to attack the problems firmly and vigorously at the local level, only one solution to preserve a healthy railroad industry appears possible, and that is action by the federal government. That the Government has the power to act in certain directions through the courts is unquestionable. Both the due process and the commerce clauses of the Constitution protect interstate carriers from the burden of multiple state taxes, in that they have been interpreted to limit state taxes to that portion of the interstate organism which may be properly attributable to each of the various states in which the carrier operates.[66] Notwithstanding the apparently continuing vitality and the implications of *New York C. R.R. v. Miller*[67] and *Northwest Airlines v. Minnesota*,[68] the Supreme Court in 1952, in *Standard Oil Co. v. Peck*,[69] affirmed its position against multiple taxation of interstate operations when "the tax would have no relation to the opportunities, benefits, or protection which the taxing state gives those operations."[70]

If the federal courts find it impossible to act, federal legislative action to control state and local taxes is an obvious alternative. Indeed, several Supreme Court decisions have stated that a legislative solution is indicated.[71] Recently, in a dissenting opinion, Mr. Justice Frankfurter insisted that the problem of conflicting and burdensome state taxation of commerce can only be resolved by Congress after a full and thorough canvassing of the multitudinous and intricate factors which compose the problem of the taxing freedom of the states and the needed limits on such state taxing power. "Congress alone can formulate policies founded upon economic realities, perhaps to be applied to the myriad situation involved by a properly constituted and duly informed administrative agency."[72]

[62] N.J. Laws 1959, ch. 14.
[63] *Annual Message to the Legislature*, LEGIS. Doc. No. 1, at A22, A25 (1959).
[64] N.Y. Sess. Laws 1959, ch. 16.
[65] N.Y. Sess. Laws 1958, ch. 970.
[66] Nashville, C. & St. L. Ry. v. Browning, 310 U.S. 362, 365 (1940).
[67] 202 U.S. 584 (1906).
[68] 322 U.S. 292 (1944).
[69] 342 U.S. 382 (1952).
[70] *Id.* at 384-85. See also Northwestern States Portland Cement Co. v. Minnesota, 358 U.S. 450 (1959).
[71] Northwest Airlines v. Minnesota, 322 U.S. 292, 302 (1944) (concurring opinion); McCarroll v. Dixie Greyhound Lines, 309 U.S. 176, 185, 188 (1940) (dissenting opinion).
[72] Northwestern States Portland Cement Co. v. Minnesota, 358 U.S. 450, 470, 477 (1959) (dissenting opinion). In a footnote, Mr. Justice Frankfurter called attention to the Australian resolution of the problem, which is a national arrangement whereby taxes are collected by the Commonwealth, and from these revenues, appropriate allocations are made annually to the states through the mechanism of a Prime Ministers' Conference. *Id.* at 476-77 n. 4.

One writer, in discussing the tax situation in New Jersey above referred to, has specifically suggested the kind of an amendment which might be made to the Interstate Commerce Act:[73]

> No state shall, through taxation, expropriate such a share of the net income of a carrier earned within the state that, if a like share were expropriated by each of the other states in which the carrier operates, the result would be either to impair the carrier's credit or to weaken or incapacitate it as an instrumentality of interstate commerce.

Federal legislation of this sort would necessarily result in marked inroads on local governmental powers. Such action will hardly be palatable to those who believe in states' rights in this field and who resent the relentless intrusion of the federal government into local affairs. Such action would be even more unpalatable to those who view—and perhaps rightly—federal aid of any kind as the first step towards nationalization. If those fears are well grounded, and ultimate nationalization of the railroads were to take place, it would be followed by nationalization of all forms of transport, since the federal government would hardly countenance continuing subsidy of airways, highways, and waterways in competition with its own rail operations. Moreover, if the Government withdrew subsidies to those other forms of transportation, many of them would thereby be confronted with insurmountable financial problems, especially in a business recession, and they would likewise fall into government hands.

For numerous reasons, this paper has advocated action by local governments not only because the problem demands, and is capable of, solution at that level, but because it is, on the whole, desirable to forestall further incursions by the federal government into local affairs. A forthright and courageous approach to the problem is needed. Appealing reasons for avoidance of the issue are easily found. Commissioner Landis, of the New York Public Service Commission, in his supplementary concurring memorandum printed as a part of the report,[74] after noting state taxes paid to other states by certain New York railroads, says that the report should "condemn strongly the unwisdom" of any across-the-board tax reduction because the "disparate figures" of taxation in other states, which he notes New Jersey exacts "in a truly discriminatory manner, . . . illustrate the inequities involved if New York should take unilateral action along the lines suggested."[75] Except for New Jersey, could there be a more appropriate state than New York (which currently taxes railroads at three times the national average) to lead the way to equality and justice in taxation through unilateral action?

It is all too easy both for particular industries and geographic localities faced with difficult problems to thrust the solution on Congress, and evidence of this proclivity is forthcoming every day. Indeed, the recent report of the New York Public Service Commission, although recognizing certain areas in which the local

[73] Haskins, *The Discriminatory Effect of Multiple State Taxation of Interstate Carriers*, 5 J. PUB. L. 327, 341-42 (1956).

[74] PUBLIC SERVICE COMM'N, *op. cit. supra* note 12, at 47.

[75] *Id.* at 56.

governments must act, expressly disclaims the power of the states to resolve the general passenger service problem, even within its own borders. "We are compelled," states the report, "to look to Washington for its regulation. We must also look to Washington for its salvation."[76] And, in his concurring memorandum, Commissioner Landis states that "the problem of passenger deficits, even with respect to the New York railroads, is basically a national and not a state problem."[77]

A more encouragingly realistic, though still somewhat limited, approach to the problem caused by the onerous tax burden imposed upon railroads serving New York State is contained in a special report to Governor Rockefeller, dated March 12, 1959.[78] The report of a committee headed by Robert W. Purcell reached several basic conclusions from its study of the New York tax structure:

1. Serious discrepancies exist between communities within the state as regards railroad taxation.

2. Railroad taxation is inequitable and excessive.

3. Taxation of railroads has cost the state many millions of dollars in investments and payrolls and, unless corrected, will result in a further decline in business activity in the state in relation to that of other states.

In order to halt further deterioration of the railroads serving New York State and in order to grant a modest program of tax relief, the committee proposed the following program:

1. Immediate elimination of the special franchise tax on the intangible rights of the railroads.

2. A freeze at current levels of all other railroad real property and special franchise taxes.

3. Exemption from taxation of such improvements as grade crossing eliminations, protective devices at grade crossings, and other installations made primarily in the public interest, as well as elimination of taxation on the increased value created by other railroad reconstruction.

4. A change in the basic method of taxing railroads which would go into effect gradually over a four-year period. Taxes would be computed on a special formula which gives greater emphasis in the taxation system to the element of economic worth, while still retaining, but to a less important extent, the traditional concept of reproduction costs. Under this special formula, taxes would fluctuate from year to year, depending in part upon the earnings of the railroads averaged over the prior five years.

The report recognizes the extent of the New York tax burden, noting that even with the recommended changes, railroad taxes in New York would still be among the

[76] *Id.* at 27. [77] *Id.* at 61.

[78] ROBERT W. PURCELL, SPECIAL REPORT TO THE GOVERNOR ON PROBLEMS OF THE RAILROAD AND BUS LINES IN NEW YORK STATE (1959).

highest in the nation and twice as high per mile of road as in most of the midwestern states through which the main railroad systems run.

It must be emphasized that more is involved than the economic problems of the railroads, the inequalities and discrimination in favor of competitors, or the threat of nationalization. From the earliest days of the Republic, the structure of the government of the United States has presupposed a balance between national and local power. Historically, the strength of the federal and of the local governments has depended on mutual restraint and mutual support. In the context of the American constitutional system, as it has developed and now exists, the balance is not only one of power, but of jurisdiction. As men come to believe that local freedom and local rights are hindrances to efficiency or are incapable of accomplishing desired ends and objectives, they tend to turn to simple but autocratic remedies. In a free society, government must remain in touch with its citizens through local political organization, in order that an efficient central government be tempered by a regime of strong local governments.

In the course of a recent address, Dean Pound, of the Harvard Law School, has referred to "the enormous development of transportation and communication" which makes the area of the locality with separate interests more and more difficult to define, and he then went on to say:[79]

> A federal government requires balance. It is organized on the idea of balance—balance of state and nation, balance of locality and state, balance of individual and society, balance of the general security and the individual life. Balance is by no means an obsolete idea of the eighteenth century. It is only by achieving and maintaining these balances that a single political organization can rule a whole continent except as an autocracy.

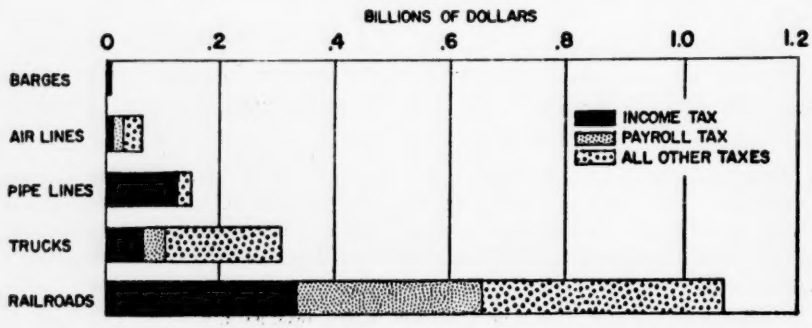
[79] Pound, *Why Law Day?*, Harv. Law School Bull. X, Dec. 1958, pp. 3, 7.

THE FEDERAL INCOME TAX AND REGULATED TRANSPORTATION

JAMES G. GIDDING* AND ARNOLD B. MCKINNON†

If the ability to pay taxes, particularly those based on income, is a criterion of the efficiency of a mode of transportation, the clear superiority of the railroads is amply demonstrated. Their income taxes alone in 1957 exceeded the total taxes paid by the transportation industry's next largest taxpayer, the regulated motor carriers. (See table.) Unfortunately, however, these enormous taxes are not an index of

TABLE
TAXES PAID BY REGULATED CARRIERS
YEAR 1957[1]



railroad prosperity. Thus, net railway operating income in 1957, of about $922,000,000, constituted a return of only 3.36 per cent upon the railroads' average net property investment.[2] For the year, their net income (reflecting the inclusion of other than railway operating income and the deduction of interest) was only $737,000,000, or 2.66 per cent return on this investment.[3]

It is not surprising, therefore, that by the end of 1957, the financial situation of the railroad industry was extremely serious. The Senate Committee on Interstate and Foreign Commerce observed:[4]

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[1] ICC, BUREAU OF TRANSPORT ECONOMICS AND STATISTICS, SEVENTY-FIRST ANN. REP. ON TRANSPORT STATISTICS IN THE UNITED STATES FOR THE YEAR ENDED DEC. 31, 1957, at 1, 6, 9-11, 22-23, 116, 130 (1958); CAB Form 41, Schedule P-41, for the year ending Dec. 31, 1957.

[2] See ASS'N OF SOUTHEASTERN RAILROADS, RAILROAD INFORMATION 22, 50, 70 (1959). As a comparison, the United States Treasury recently sold one-year bills ". . . at a price equivalent to an average yield of 4.728%." Wall Street Journal, July 9, 1959, p. 3, col. 3.

[3] ASS'N OF SOUTHEASTERN RAILROADS, *op. cit. supra* note 2, at 50.

[4] Senate Comm. on Interstate and Foreign Commerce, *Transportation Act of 1958*, S. REP. No. 1647, 85th Cong., 2d Sess. 7 (1958).

Because of the essential part the railroads play in our whole transportation system it was a cause of great concern to your subcommittee when we observed the rapid deterioration of the railroad position in the fall of 1957.

. . . .

It was clear . . . that not only were the railroads being adversely affected by the business recession which was then appearing, but that, in fact, the sickness of the railroads was contributing greatly to the deepening recession of the Nation.

In 1958, net railway operating income continued to decline to $762,000,000, or a rate of return of 2.76 per cent. Net income was less than $602,000,000, or a return of less than 2.2 per cent on the net property investment of 1958.[5] For the first five months of 1959, net income ". . . totaled $247 million, up from $75 million in the like part of 1958 but down from $289 million in the January-May period of 1957."[6]

At the end of June 1959, the Senate Committee stated:[7]

Freight car shortages, of varying duration and severity, have plagued this country and its shippers for more than a generation. . . .

The railroads, the Interstate Commerce Commission, and other transportation experts, have wrestled with this perennial problem for many years, but it still persists and, in many respects, has become progressively worse. It is now a problem of major national importance, not only from the viewpoint of the railroads and their employees, but also from the viewpoint of the Nation's shippers and, indeed, from the viewpoint of the national defense. This stark fact is universally recognized, unchallenged, and supported by the testimony offered before this committee.

The depressed condition of the industry is not simply or easily explained by pointing to one or two factors.[8] Certainly, increased competition, deliberately sponsored in large part by the federal government, is most important. Such competition, in many ways uneconomic, has depressed the revenues of the rail-

[5] Ass'n of Southeastern Railroads, *op. cit. supra* note 2, at 22, 50.

[6] Wall Street Journal, July 7, 1959, p. 23, col. 2. Because of the steel strike, ". . . net railway operating income for the 12 months of 1959 may not top $800 million—although pre-strike estimates put the probable figure at $950 million." Railway Age, Oct. 5, 1959, p. 9.

[7] Senate Comm. on Interstate and Foreign Commerce, *Freight Car Supply*, S. Rep. No. 452, 86th Cong., 1st Sess. 2 (1959).

[8] The Senate Committee found that the railroads suffered from ". . . the development of newer methods of transportation that offer intense competition to the railroads [including] the development of airplanes, and the building of modern highways on which move a large number of buses and trucks . . . ; the Government assistance offered to the railroads' competitors [including] the building of highways and airports, the provision of toll-free waterways, and other facilities . . . overregulation . . . usually under laws and procedures that are ancient and outmoded," and finally "a failure to compete aggressively for business by use of modernized equipment, by adjustments in plant and financial structures, as well as failure to adjust rates to compete effectively for traffic." Senate Comm. on Interstate and Foreign Commerce, *Transportation Act of 1958*, S. Rep. No. 1647, 85th Cong., 2d Sess. 10 (1958). Another problem remains the 10% tax imposed upon travel. The tax was imposed to discourage passenger traffic, principally rail, during World War II. It continues this function most effectively. In examining the railroad passenger train deficit, an ICC Examiner recently commented upon a government economist's recommendation that rail fares should be reduced, stating: ". . . the Government, for which this witness spoke, could do much toward increasing the attractiveness of railroad travel simply by agreeing to the removal of the 10-percent Federal tax on such travel. Unless and until they are willing to take this step, any assertion on their behalf that railroad fares exceed a proper level based on value of services is not likely to be taken seriously." Railroad Passenger Train Deficit, No. 31954, Examiner's Proposed Report, ICC, Sept. 18, 1958.

roads. Even so, the situation of the railroads would not be so serious were it not for the fact that these reduced earnings are further depleted by high taxes, including the federal income tax, and for the fact that the amount of the railroads' income subjected to tax is increased by outmoded depreciation concepts. As the Senate Committee investigating the freight car shortage stated:[9]

> Inadequate earnings by some of the railroads are an important factor. The high cost of new freight cars, coupled with unrealistic depreciation allowances, is doubtless a contributing factor.

Certainly a large part of the railroads' financial problem is caused by the combined effect of high income tax rates and low income tax depreciation allowances. These barriers to investment must be reduced if the industry is to provide the equipment demanded by the Congress and to make increasing use of technological advances now available, as demanded by the national interest.

I

THE TAX RATE

On June 30, 1959, the President signed H.R. 7523, "an act to provide a one-year extension of the existing corporate normal tax rate. . . ."[10] This act continues the Korean War provision under which the federal government taxes the income of corporations at the rate of fifty-two per cent. The fifty-two per cent rate was established in the Revenue Act of 1951, and was originally limited to expire April 1, 1954.[11] In approving the increase of five per cent in the corporate normal tax rate which took place at that time, the Senate Finance Committee stated:[12]

> The rate increase provided by your committee's bill is much larger than it would ordinarily be desirable to provide, and it is realized that if corporate rates are continued at this high level indefinitely the expansion of productive facilities may be seriously impaired.

Certainly, the fifty-two-per-cent rate has had this effect on the railroads. As one railroad president expressed it, "The railroads are half-soling their shoes beyond reason."[13] Or, in the language of economics:[14]

> The main effect of such a high corporate investment threshold is to hold an umbrella over existing productive facilities. For it defers the introduction of new capacity competitive therewith. Old facilities must become more decrepit and inefficient before they are

[9] Senate Comm. on Interstate and Foreign Commerce, *Freight Car Supply*, S. REP. No. 452, 86th Cong., 1st Sess. 3 (1959).

[10] Tax Rate Extension Act of 1959, 73 Stat. 157.

[11] Revenue Act of 1951, § 121, INT. REV. CODE OF 1939, § 13.

[12] Senate Comm. on Finance, *The Revenue Act of 1951*, S. REP. No. 781, 82d Cong., 1st Sess. 14 (1951).

[13] *Hearings Before the Subcommittee on Surface Transportation of the Senate Committee on Interstate and Foreign Commerce on Problems of the Railroads*, 85th Cong., 2d Sess. pt. 1, at 139 (1958).

[14] GEORGE W. TERBORGH, EFFECT OF THE CORPORATE INCOME TAX ON INVESTMENT 11 (1959).

replaceable. Their service lives are extended. The economy drags along in consequence with a productive mechanism of greater average age, and with more accumulated deterioration and obsolescence, than would obtain in the absence of the tax.

Furthermore, the deterrent effect of the high income tax on the introduction of new and modern capacity is not uniform. To the extent that the company or industry involved can shift the incidence of the tax to its market, the effect is less pronounced than where the corporation must absorb the tax. It has been felt, for example, that a regulated public utility shifts practically all the tax burden, as the tax becomes an item of expense entering into its rate structure.[15] This, of course, is intimately connected to the proposition that a regulated rate must provide a fair return upon the investment.[16] The extreme effect upon the railroad industry is obvious, therefore, since it is both regulated and highly competitive with other forms of transportation, so that its rate of return has been extremely small.

"The deterrent effect of the tax on investment is relatively greater for nondepreciable assets such as land, inventory, and the like, than for wasting assets such as buildings and equipment."[17] Here, again, the railroad industry is penalized by the high tax rate, for a vast amount of its investment is in such important nondepreciable items as land and grading constituting its roadbed.[18] As the roadways of competing carriers are generally furnished at taxpayers' expense, the penalty of the high tax is multiplied once more.

[15] "If the shifting is less than complete in some cases, it is because the utility is subject to competition and cannot benefit from fully tax-inclusive rates." *Id.* at 9.

[16] If the present high tax rate is to be retained much longer, recognition should be given to the principle expressed in the Excess Profits Tax Act of 1950, INT. REV. CODE OF 1939, § 448, establishing a special excess profits credit for regulated public utilities. The effect and purpose of this minimum credit was stated to be ". . . to give assurance that an excess profits tax will not be imposed on the specified regulated industries until after they earn a rate of return of 6 percent or 7 percent after paying corporate normal taxes and surtaxes (including the 2 percent additional tax for consolidated returns). Your committee believes that this is appropriate in view of the fact that the profits of these industries in the base period years were held down well below the profits earned by unregulated industries. Moreover, there is considerable evidence that rate adjustments for these industries lagged considerably behind increases in their costs of doing business. Your committee also believes that where industries are regulated by governmental bodies providing only a fair rate of return it is undesirable to consider profits allowed by such regulatory bodies as excessive for purposes of an excess profits tax, especially where the corporations are held to a relatively low rate of return. However, it should be clear that in establishing the rates of return provided by this minimum credit your committee is not in any way attempting to set a rate of return which would be proper for regulative purposes but only is concerned with the problem of establishing uniformity for purposes of determining income which should be subjected to excess profits tax." Senate Comm. on Finance, *Excess Profits Tax Act of 1950*, S. REP. No. 2679, 81st Cong., 2d Sess. 31 (1950).

[17] TERBORGH, *op. cit. supra* note 14, at 13.

[18] In addition, much rail property is operated under leases (usually entered into before 1940, many before 1900) which provided that the leased property shall be returned in good condition at the end of the lease term, perhaps 99 or 999 years later. The Internal Revenue Service refused to allow either lessor or lessee any depreciation on such leased property (whether buildings, old steam facilities, or hand-powered velocipedes), and heretofore has been upheld by the courts in many cases. See, *e.g.*, Atlantic Coast Line R.R. v. Commission, 81 F.2d 309 (4th Cir. 1936). The unreasonableness of the Internal Revenue Service approach, which ignores obsolescence entirely, is now judicially recognized. See North Carolina Midland Ry. v. United States, 163 F. Supp. 610 (Ct. Cl. 1958).

II

DEPRECIATION

As the high corporate tax rate bears more heavily upon the railroad industry than upon its competitors, or industry in general, the importance of depreciation as a source of funds to provide needed capacity and modernization cannot be overstated. Once again, however, the industry is placed at an enormous disadvantage.

It is a matter of common knowledge that railroad depreciable property is extraordinarily long lived—lives of 50 to 100 years have been used generally in respect of roadway structures and lives up to 35 years on equipment. The average overall rate for the industry is but little more than 2 percent. It is obvious that this meager flow of free cash is absolutely inadequate to meet even the downpayment for replacements in these days of inflated cost. It is equally clear that in the light of present technological advancement and high costs, no taxpayer should be required to wait such inordinate lengths of time to recover his capital investment in depreciable property.

The position of the railroad industry with its small depreciation deduction based on its long lived assets compares most unfavorably with its competitors with respect to whose depreciable assets relatively short lives have been accorded; aircraft, for example, 5 years; heavy trucks and buses for long distance use, 8 and 7 years, respectively. The mere statement of this comparison completely expounds the competitive difficulty in this area. In such an era of change, both in the way of doing things and in the diminishing value of the dollar, it is transparently clear that modernization and efficiency can more easily be accomplished by our competitors who recover their capital cost over a short period of time than is the case with the railroads which realize the need for such activity in order to continue to exist, but which are hampered in so doing in large measure by so little annual cash recovery due to their long-lived property.[19]

III

TWO PROPOSALS

The railroads have two proposals to correct this discriminatory tax burden now placed upon them by the federal income tax. One proposal would merely tend to correct the long lives heretofore assigned to railroad property, as compared to those allowed its competitors. The present disparity of perhaps four-to-one would be reduced to something like two-to-one. The second, which would be available to other carriers as well, would stimulate necessary and continuing investment in needed transportation facilities.

A. Maximum Life

The first proposal would give great, long-overdue, relief from the unrealistic depreciation rates given railroad equipment and other depreciable property. It would, in effect, recognize that obsolescence, rather than mere physical wear and tear, has

[19] *Hearings, supra* note 13, at 32-33. The Senate Committee concluded as a result of this and other testimony: "As it is now, extremely long service lives ranging in some cases from 50 to 100 years, are assigned to depreciable railway property of the railroads. These long lives attributed to railroad property for tax purposes are wholly unrealistic and constitute a severe handicap." Senate Comm. on Interstate and Foreign Commerce, *Transportation Act of 1958*, S. REP. No. 1647, 85th Cong. 2d Sess. 7 (1958).

come to the forefront as the factor determining the economic usefulness of rail equipment, quite as much as that of the equipment employed by other regulated carriers. Rolling stock would be given a maximum tax life of fifteen years; and other depreciable property, such as repair shops, a maximum life for tax purposes of twenty years.[20] Adoption of this simple proposal would be a long step forward in correcting the obsolescence now current in the railroad plant. As pointed out above, high taxes and long depreciation lives produce a high investment "threshold" and lead to continuing in service equipment which has passed its true economic usefulness, though it may be patched into continued service.

B. Construction Reserve

The second proposal would permit the carrier to establish a "construction reserve fund" patterned upon similar reserves first established for the Merchant Marine in 1936.[21] Under this proposal, a carrier might establish a construction reserve fund into which deposits would be made and deducted from income annually, up to an amount equal to the carrier's book depreciation for the year.[22] To the extent that equipment or other transportation facilities are paid for from the fund, they would have no tax depreciation basis. Thus, the tax on the amounts deposited would not be forgiven, but would be merely deferred over the life of the property purchased. If the funds are not used for approved purposes within five years or are diverted to other purposes, such as the payment of dividends, they would be subject to tax at the rate at which they were deducted, plus interest during the interim.

Neither of these proposals would have the effect of tax forgiveness; both would defer taxes to the future. That such tax deferral can produce needed investment was amply demonstrated by the amortization programs of World War II and the Korean War. As was recognized in each case, amortization merely postponed the tax and did not forgive it. A study prepared by the staff of the Joint Committee on Internal Revenue Taxation found:[23]

The experience through 1953 indicates that a rapid amortization program can stimulate railroad expansion to the point of being able to handle the demand during the annual peak

[20] See, *e.g.*, H.R. 7212, 86th Cong., 1st Sess. (1959).

[21] Merchant Marine Act of 1936, § 607(h), 49 Stat. 2005, 46 U.S.C. § 1177 (1952); § 510(e), 53 Stat. 1183 (1939), 46 U.S.C. § 1160 (1952); § 511, 54 Stat. 1106 (1940), 46 U.S.C. § 1161 (1952).

[22] "Recognizing the importance of maintaining the railroad industry, and other common carriers, in a state of operational efficiency and being assured that the transportation industry is unable by reason of its financial condition adequately to maintain, replace, or modernize its facilities and plant, the subcommittee has determined that this proposal is reasonable and appropriate. Taxes are deferred pursuant to this proposal; not forgiven. It is believed that aside from the immediate beneficial effect that will result from this proposal, it will also have a long-range beneficial effect, not only on the operating efficiency of the carriers, but also on our economy. The use of this fund as a means of providing for capital replacement or expansion would also seem to provide a means whereby the level of procurement in this industry would be constant despite the rise and fall in the economy. This, of course, contributes to an orderly and stable economy redounding to the benefit of all." Senate Comm. on Interstate and Foreign Commerce, *Transportation Act of 1958*, S. Rep. No. 1647, 85th Cong., 2d Sess. 17 (1958).

[23] STAFF OF JOINT COMMITTEE ON INTERNAL REVENUE TAXATION, 84TH CONG., 2D SESS., REPORT ON 5-YEAR AMORTIZATION OF EMERGENCY DEFENSE FACILITIES UNDER SECTION 168 OF THE INTERNAL REVENUE CODE OF 1954, at 35 (Comm. Print. 1956).

periods. This was accomplished in 1953 at the expense of having a surplus of available cars equal to 2 to 5 per cent through 8 of the 12 months. The previous analysis suggested that operating by themselves the railroads probably would not accommodate this demand without car shortages during the harvest season. The fact that the railroads were able to handle this peak demand without shortages during 1953 is significant as a result of the emergency amortization program.

As this experience demonstrates, needed equipment and other transportation facilities can be financed and such investment can be stimulated by shortening the depreciation period for existing rail facilities and by adopting a "construction reserve" available to all carriers.

THE RATE OF RETURN IN AIR TRANSPORT

PAUL L. HOWELL*

I

COMPARISON WITH OTHER TRANSPORT AGENCIES[1]

A "fair and reasonable rate of return" in the sense of *Smyth v. Ames*,[2] *Bluefield Water Works*,[3] and *Hope Natural Gas*[4] scarcely exists today for the major forms of transportation: railroads,[5] motor-vehicle common carriers,[6] urban transit, water transport, and airlines. Except for oil[7] and gas[8] pipelines, the transport agencies present such special situations that the rate-of-return problem in its classical sense is hardly applicable.

For years, the railroads have not earned a rate of return that would attract capital, and currently they have such a passenger deficit[9] that the question of exceeding, or even of attaining, a fair return on a fair value has not been given serious consideration in proceedings before the Interstate Commerce Commission[10] or state commissions.[11]

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[1] For other aspects of regulation of air transport, see symposia *Air Cargo*, 15 LAW & CONTEMP. PROB. 1 (1950), *Aviation Transport*, 11 *id.* at 429 (1946).

[2] 169 U.S. 466 (1898).

[3] Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of West Virginia, 262 U.S. 689 (1923).

[4] FPC v. Hope Natural Gas Co., 320 U.S. 591 (1944).

[5] SIDNEY L. MILLER & VIRGIL D. COVER, RATES OF RETURN CLASS I LINE HAUL RAILWAYS, 1921-1948 (1950).

[6] CLYDE B. AITCHISON, FAIR REWARD AND JUST COMPENSATION, COMMON CARRIER SERVICE (1954).

[7] Reduced Pipe Line Rates and Gathering Charges, 243 I.C.C. 115 (1940), 272 I.C.C. 375 (1948).

[8] FPC v. Panhandle Eastern Pipeline Co., 324 U.S. 635 (1945); FPC v. Hope Natural Gas Co., 320 U.S. 491 (1944); FPC v. Colorado Interstate Gas Co., 324 U.S. 581 (1945); Northern Natural Gas Co. v. FPC, 206 F.2d 690 (8th Cir. 1953); Panhandle Eastern Pipe Line Co., 3 P.U.R.3d 396 (FPC 1954); United Fuel Gas Co., 12 F.P.C. 251 (1953); Michigan-Wisconsin Pipe Line Co., FPC Opinion No. 275 (July 28, 1954); symposium *The Regulation of Natural Gas*, 19 LAW & CONTEMP. PROB. 323 (1954); Howell & Hart, *The Promoting and Financing of Transcontinental Gas Pipe Line Corporation*, 7 J. FINANCE 311 (1951).

[9] NATIONAL ASS'N OF RAILROAD AND UTILITIES COMM'RS, SPECIAL COMMITTEE TO STUDY THE RAILROAD PASSENGER DEFICIT PROBLEM, REPORTS (1953-58). See also Railroad Passenger Train Deficit, No. 31954, Examiner's Proposed Report, ICC, Sept. 18, 1958.

[10] In 1951, this Commission commented as follows: "Judged by any standard the rates of return earned or prospectively to be earned by the railroads . . . are substandard." Increased Freight Rates, 1951.

Indeed, this has been true since the *O'Fallon* case[12] sounded the death knell of the recapture provision of the Transportation Act of 1920.[13] Earnings of motor common carriers also are severely limited by competition. Urban transit has been almost completely taken over by municipalities because private agencies were not able to meet rising wages, taxes, and other expenses. Inland and ocean water transport is supported by considerable subsidy in many forms.

Until 1951, when the "Big Four" of the domestic trunk lines (American, United, Eastern, and TWA) were placed on cost rates for carrying mail,[14] the growing industry of air transport was also heavily subsidized; and local service air carriers are still on subsidy.[15] Today, eight years later, the Civil Aeronautics Board is laboring to adapt traditional concepts to meet modern operating conditions in commercial aviation.[16] This paper will appraise the suitability of these concepts for this dynamic young transport industry so vital to our economy and national defense.

II

Economic Requirements—A Rate of Return That Will Attract Capital

A "fair and reasonable rate of return" is that return which is necessary to avoid constitutional prohibitions against the confiscation of property. This, however, is a somewhat negative legalistic approach; its further development will be left to the courts.

The second, or economic, approach considers what the public must pay to obtain employment of the factors of production necessary to furnish the desired service.[17] The abstract concept, "fair and reasonable rates," becomes meaningful, then, in light of the end to be achieved—fares that will provide sufficient revenues to compensate for all costs of rendering that service. Among such costs must be included a return sufficient to attract capital.

The supply price of capital should be the paramount consideration of a utility commission in setting over-all rate levels. If this economic standard is not met, even though the constitutional standards are technically satisfied, the public, whom regulation is designed to protect, will not be rendered the desired quality of service. A cap-

284 I.C.C. 589, 612 (1952), 297 I.C.C. 17, 49 (1955). See also Increased Freight Rates, 1956, 300 I.C.C. 633, esp. 687 (1957); Increased Express Rates and Charges, 1957, *Ex parte* No. 210, ICC, Oct. 13, 1958; Increased Freight Rates, 1958, 304 I.C.C. 289 (1958); Railway Mail Pay—Application of Eastern Railroads, 1956, 304 I.C.C. 135 (1958); agreements of Rail Carriers, Post Office, and the ICC, dated Dec. 30, 1957. For the past decade, Class I railroads have averaged earnings of 3.68% on "net investment" (original cost less recorded depreciation and amortization); in 1958, the return was 2.76%. James C. Nelson, Railroad Transportation and Public Policy ch. 7 (1959).

[11] N.Y. Pub. Serv. Comm'n, Report of Investigation of the Financial Condition of the Railroads Operating in the State of New York (1959).

[12] St. Louis & O'Fallon Ry. Co. v. United States, 279 U.S. 461 (1929).

[13] 41 Stat. 157.

[14] American Airlines, *et al.*, Mail Rates, 14 C.A.B. 558 (1951).

[15] Rate of Return of Local Service Carriers, No. 8404, CAB (1956).

[16] General Passenger Fare Investigation, No. 8008, CAB, May 10, 1956.

[17] Towne, *The Problem of a Fair Rate of Return*, 19 ICC Prac. J. 357 (1952); FPC, The Problem of the "Rate of Return" in Public Utility Regulation ch. 2 (1938).

ital-attracting rate of return is particularly needed to enable a new industry like air transport to serve the growing needs of modern business.

It should be noted that the investors' return for the use of their capital is referred to here as a "cost." No allowance is made for profit; to the extent there is risk in the business, this risk enters into the supply price of the capital and becomes a cost that consumers must pay.[18] The supply-price approach emphasizes what must be earned to attract capital in the future. Its view is forward-looking.

The key question for the economic or financial approach is this: What revenues do the carriers need, in the light of operating expenses and income taxes, to provide a return which will enable the carriers to (a) maintain the financial integrity of their working capital position; (b) compensate investors for the risk to their capital; (c) pay interest and dividends; and (d) attract additional capital for expansion on favorable terms? The answer to this question, when related to the appropriate capital base, constitutes the framework for a fair and reasonable rate of return.

Pause for a moment to consider an equity investor's requirements. A casual inspection of the financial page demonstrates that common stockholders are interested in the return on capital outlay, in the form of earnings, dividends, and/or capital appreciation. What return capital requires is determined in the competitive market place by weighing the many investment alternatives and including risk of loss and speculative gain possibilities. This evaluation underlies the going market rate that must be paid for capital by those who wish to use it in providing their service.

It is well known that most investors do not know either what is the "value" of the property being committed to utility service or what is the rate of return thereon. Both are computed according to technical rate-proceeding rules and vary considerably from jurisdiction to jurisdiction, or even from utility to utility in the same jurisdiction, or even for the same utility over a period of time.

As stated in the immortal words of Mr. Justice Brandeis:[19]

> The thing devoted by the investor to the public use is not specific property, tangible and intangible, but capital embarked in the enterprise. Upon the capital so invested the Federal Constitution guarantees to the utility the opportunity to earn a fair return.

Consequently, to take a market-established cost of capital and apply it to an artificially-defined property base results in a nonhomogeneous mixture of oranges and apples. Instead of complicated determinations of the "value of property" devoted to public service, the rate base should be the sums devoted to the enterprise under "honest, economical, and efficient" financing—that is, the right-hand side of the balance sheet. Unfortunately, judicial treatment of this problem has often been an archaic hangover from the law of eminent domain and has had little direct relationship to the economic task confronting administrative agencies in setting rates that will attract the capital needed to supply the desired service.

[18] FRANK KNIGHT, RISK, UNCERTAINTY, AND PROFIT (1921).

[19] State *ex rel.* Southwestern Bell Telephone Co. v. Pub. Serv. Comm'n of Missouri, 262 U.S. 276, 290 (1923) (concurring opinion of Justice Brandeis).

III

EARLY TREATMENT OF RATE OF RETURN BY THE CAB

A. Mandate of the Federal Aviation Act

Congress, in section 102 of the Federal Aviation Act,[20] has directed the CAB, *inter alia,* to (a) encourage and develop an air transportation system adapted to the needs of commerce, the Postal Service, and the national defense; (b) regulate air transport in such manner as to foster sound economic conditions; and (c) promote adequate, economical, and efficient service by air carriers at reasonable charges.

As a guide, section 1002(e)[21] sets forth a rule of rate-making whereunder the Board, with respect to the determination of rates for air carriage, should consider, among other factors:

(1) The effect of such rates upon the movement of traffic;
(2) The need in public interest of adequate and efficient transportation of persons and property by air carriers at the lowest cost consistent with the furnishing of such service;
(3) Such standards respecting the character and quality of service to be rendered by air carriers as may be prescribed by or pursuant to law;
(4) The inherent advantages of transportation by aircraft; and
(5) The need of each air carrier for revenue sufficient to enable such air carrier, under honest, economical, and efficient management, to provide adequate and efficient air carrier service.

B. Mail Subsidy and Its Relation to the Rate of Return

The attention of the CAB has been directed primarily to mail rates and the subsidy provisions relating to the "need" of the carriers. Section 406(b) provides that in fixing and determining fair and reasonable rates of compensation, the Board shall take into consideration:[22]

> . . . the need of such air carrier for compensation for the transportation of mail sufficient to insure the performance of such service, and, together with all other revenue of the air carrier, to enable such air carrier, under honest, economical, and efficient management, to maintain and continue the development of air transportation to the extent and of the character and quality required for the commerce of the United States, the Postal Service, and the national defense.

Early in the administration of the Act, the Board made some policy decisions. In view of the absence of reliable data, the newness of the industry, and the Board's responsibilities for subsidies, the CAB determined that a seven per cent return was adequate in making retroactive adjustments in mail rates. In setting mail rates for past periods, it was felt that the risk factor had been eliminated and so there was no need for it to be compensated.

[20] 72 Stat. 740, 49 U.S.C.A. § 1302 (Supp. 1958), formerly Civil Aeronautics Act § 2, 52 Stat. 980 (1938), 49 U.S.C. § 402 (1952).
[21] 72 Stat. 789, 49 U.S.C.A. § 1482(e) (Supp. 1958).
[22] 72 Stat. 763, 49 U.S.C.A. § 1376(b) (Supp. 1958).

Mail rates for the future were to be set with the objective of enabling the carrier, under honest, economic, and efficient management, to earn an over-all rate of return of eight per cent on invested capital. These figures were not developed from elaborate capital market studies, but were adopted by the use of the Board's expert administrative discretion in setting policy for subsidy payments.[23]

In considering mail subsidy payments for international air operations, the Board and its staff for the first time made an extensive analysis of the cost of attracting capital. Examiner Radcliffe, after studying extensive exhibits and testimony with respect to investor receptiveness for airline securities, found 9.3 per cent to be a fair and reasonable over-all rate of return.[24] The market evaluation of airline securities, as indicated by earnings-price ratios prior to 1952, showed great variation among carriers and timewise. The postwar airline depression of 1946-47 and later the Korean airlift boom gave great instability to earnings-price ratios. The Board, with data for an additional year and a half to guide it, concluded that a nine per cent return would attract capital on advantageous terms.[25] The opinion also contained language indicating that the Board felt the overseas operations to be somewhat more hazardous financially and entitled to a flat one per cent increase in return over that allowed to domestic operations.

In the postwar period, the carriers (with the exception of Eastern), as a result of reduced fares and mail rates, increased costs, increased capacity, and lower load factors, incurred substantial losses. Not until 1951, after more than twenty years of operation, were the four large carriers sufficiently on their financial feet to get off mail subsidies; and Northeast, the last of the trunklines, went off subsidy in 1959.[26]

C. The 1952 General Passenger Fare Investigation

Early in 1952, the carriers, concerned with falling off of the Korean War activities, rising costs, and additional equipment that resulted in lower load factors, were alarmed by the decline of profits. The leading carriers filed (a) to have all tickets increased by one dollar, and (b) to eliminate the five per cent round-trip discount. The Board, though not unanimous, permitted the one-dollar increase to go into effect, thus giving the industry for the first time a "tapering" fare recognition of the greater

[23] PAUL W. CHERINGTON, AIRLINE PRICE POLICY: A STUDY OF AIRLINE PASSENGER FARES ch. 3 (1958). See Trans-Atlantic Final Mail Rate Case, 19 C.A.B. 464 (1954).

[24] See Examiner's Initial Decision (1953), reprinted in Trans-Atlantic Final Mail Rate Case, 19 C.A.B. 464, 528 (1954).

[25] *Ibid.*

[26] For the "Big Four" see note 14 *supra*. In removing Northeast from subsidy mail rates, the CAB said: "We still believe that Northeast should be self-sufficient, although as of this date it has not attained self-sufficiency." In the Matter of Northeast Airlines, Inc., No. 8497, Order and Opinion No. E-13465, CAB, Feb. 3, 1959, p. 4. In its report to stockholders covering the year 1958, Northeast reported a net loss of $4,640,000 after mail subsidy payments of $2,386,000. This carrier has encountered difficulty in penetrating the highly competitive New York-Florida market, as was anticipated by CAB Members Gurney and Denny. See New York-Florida Route Case, No. 3051, Order No. E-10645, CAB, Sept. 28, 1956. See also the examiner's initial decision in that proceeding, which favored making Delta the additional New York-Florida carrier. Northeast reports an operating deficit for the first 9 months of 1959 of $2,600,000.

terminal cost of short-haul business.[27] The five per cent discount was denied, but a general investigation of passenger fares was initiated.[28]

With the resurgence of carrier earnings, the carriers, asserting the great expense and the vagueness of the issues involved, pressed for dismissal of the 1952 General Passenger Fare Investigation. Some carriers also urged the substitution of an operating-ratio approach for the rate-of-return concept as a measure for the reasonableness of earnings.[29]

After much discussion and with sharp differences of opinion, the majority of the Board dismissed the proceeding with this statement of policy:[30]

> It is our intent to examine any future fare or mail rate proposals, not only in the light of conditions prevailing at the time they are advanced but with full consideration of the abnormal earnings of prior years and the excess earnings which may be expected in the future, as indicated by such experience. In short, should earnings fall markedly in the future the carriers will be expected to absorb such losses without resort to fare or mail rate adjustments unless it can be demonstrated that such earnings are below the level necessary to provide a fair return over a reasonable extended period which includes the good years as well as the bad.

Members Lee and Adams dissented vigorously to the dismissal of this proceeding. One of their chief objections was to the *ad hoc* approach of the Board and its being buffeted about by immediate crises without a long-range program or policy. Adams, in particular, emphasized that the Board had never made a study of the facts in a formal proceeding and thus had no reliable information from which to establish a policy and reach a conclusion as to the fairness and reasonableness of rates.

IV

1956 GENERAL PASSENGER FARE INVESTIGATION

A. Causes and Objectives

This lack of information set the stage for the next act. Late in 1955, the Comptroller General submitted reports to Congress that were sharply critical of methods used in determining airline subsidies and rates for the haulage of mail.[31] Early in 1956, the House Antitrust Subcommittee, headed by Emanuel Celler, held extensive hearings on competition in the airlines and the reasonableness of rates.[32] About this time, too, under the leadership of the new Chairman, James R. Durfee, the Board voted to make an extensive investigation of airline fares in three major proceedings:

[27] See CHERINGTON, *op. cit. supra* note 23, at 100-02.

[28] General Passenger Fare Investigation, No. 5509, Order No. E-6305, CAB, April 2, 1952.

[29] See CHERINGTON, *op. cit. supra* note 23, at 104.

[30] General Passenger Fare Investigation, No. 5509, Order No. E-7376, CAB, May 14, 1953.

[31] JOSEPH CAMPBELL, AUDIT REPORT TO CONGRESS RE THE CIVIL AERONAUTICS BOARD (1955) (filed April 9, 1956).

[32] *Hearings Before the Antitrust Subcommittee of the House Committee of the Judiciary on Monopoly Problems in Regulated Industries*, 84th Cong., 2d Sess. pt. I, vols. 1-4 (1956).

1. the 1956 General Passenger Fare Investigation;[33]
2. The Rate of Return of Local Service Carriers;[34] and
3. the Capital Gains Proceeding.[35]

The 1956 General Passenger Fare Investigation was instituted following a period of six years during which the trunkline industry enjoyed the highest level of profits in its history. As pointed out in the Board's opinion and order fixing the scope of the issues:[36]

> What led to the institution of this investigation was [the Board's] concern, based on the level of earnings reported by most of the respondents, over the possibility that the public was being subjected to excessive charges, over-all, for passenger transportation.

In accordance with that order, the two main purposes of the 1956 General Passenger Fare Investigation are:[37]

(1) to develop appropriate and well-defined standards respecting the earnings required by the domestic trunkline carriers for proper development consistent with the public interest; and
(2) based on such standards, to require or permit such overall decreases or increases in domestic fares as the facts may warrant.

B. The Suspended Passenger Fare Increase Case

The short-term approach to the airline problems which has been so characteristic has been noteworthy in this proceeding. When the General Passenger Fare Investigation started out early in 1956, the premise seemed to be that rates might be too high and perhaps should be reduced; the carriers were dragging their feet with delaying tactics. Within eight months, the carriers had completely changed their position; they began to allege that earnings were entirely inadequate and to urge that matters be expedited. In January 1957, most of the trunkline carriers filed tariffs for increased rates, which were immediately suspended and consolidated for hearing.[38] Informally this was referred to as the "6 % fare case," and its docket was given precedence over the 1956 General Passenger Fare Investigation, which was recessed.

The carriers contended, during extensive hearings, that earnings had fallen precipitously and that they were in need of emergency relief which could not await determination of the broader issues. The staff of the Bureau of Air Operations (BAO) argued that the carriers faced a temporary situation and that the issues should not be decided by a "keyhole" approach. On September 25, 1957, by a vote of three to two, the Board, regarding the then-current low earnings as a temporary phe-

[33] General Passenger Fare Investigation, No. 8008, Order No. E-10279, CAB, May 10, 1956.
[34] Rate of Return of Local Service Carriers, No. 8404, Order No. E-10843, CAB, Dec. 10, 1956.
[35] Capital Gains Proceeding, No. 7902, Order No. E-12855, CAB, Aug. 1, 1958.
[36] General Passenger Fare Investigation, No. 8008, Order No. E-10488, CAB, July 27, 1956, p. 2.
[37] CAB ANN. REP. 9 (1956).
[38] Suspended Passenger Fare Increase, No. 8613, Order E-11812, CAB, Sept. 25, 1957.

nomenon, rejected applications for increased rates.[39] On January 8, 1958, the Board rejected petitions for reconsideration, because they "failed to establish that relief requested is warranted."[40]

TWA, followed by Capital, immediately filed new and higher tariffs providing for a fifteen per cent increase in rates plus a dollar a ticket. On January 24, 1958, just two weeks after denial of increases in the Suspended Passenger Fare Increase case, the Board announced, in a press release, that it was denying TWA's filing, but that it would be receptive to filings which increased fares by four per cent plus a dollar a ticket. The suggested action was immediately taken by the trunklines.

The Board, in its subsequently-published opinion, stated that it had acted on the basis of recently-prepared staff memoranda[41] and earnings reports specially requested from the carriers. One member dissented on the basis that it was "too little and too late." Board member Minetti filed a delayed dissent sharply critical of the pressure tactics of the carriers and the lack of definitive data.[42]

Seven months later, the carriers, with approval of the Board, eliminated stop-over privileges, withdrew round trip discounts, and reduced family-fare discounts—action which increased rates about four per cent.[43]

C. Supply Price of Capital for Domestic Trunk Carriers

To pay the economic cost of attracting capital, a rate of return must be provided which will (a) maintain the utility's "financial integrity"; (b) cover interest, allow reasonable dividends, and permit something to be added to surplus in normal times as a margin of safety; and (c) provide the ability to sell stocks on advantageous terms in the competitive market. A return which fulfills these goals should not only properly balance the interests of consumers and investors, but also meet the requirements of sections two and 1002 of the Civil Aeronautics Act by being "promotional" in character.[44]

For proper analysis, it is necessary to consider in detail what is the supply price of capital for domestic air lines. This, in turn, involves a determination of (a) the cost of debt capital; (b) the cost of equity capital; and (c) an appropriate capital structure.

1. *Cost of debt capital for airlines*

As the 1956 General Passenger Fare Investigation went on, interest rates increased. Since utility rates are made for the future, regulating authorities must make allowance for future contingencies. In the case of debt, the problems revolve around the amount of debt-financing to be done and at what rate.

[39] *Id.*, Order No. E-11812, Sept. 25, 1957. [40] *Id.*, Order No. E-12092, Jan. 8, 1958.

[41] See General Passenger Fare Investigation, No. 8008, Bureau Counsel Exhibit No. 120, *A Fair and Reasonable Rate of Return for Domestic Trunkline Air Carriers*, CAB, Oct. 15, 1957 [prepared by Paul Howell Associates and hereinafter cited as HOWELL EXHIBIT].

[42] TWA, *et al.*, Interim Fare Increase, No. 9288, Order No. E-12203, CAB, Feb. 25, 1958. See Board member Minetti's dissent, dated April 16, 1958.

[43] Withdrawal of Round-Trip Discounts and Related Matters, No. 9931, Order No. E-13066, CAB, Oct. 14, 1958; CAB press releases 58-64 and 58-63, Oct. 14, 1958.

[44] See *supra* notes 20-21.

In general, counsel and witnesses for the airlines contended that current money rates should be the chief factor in determining the proper rate for obtaining this component of capital, even though much debt had already been contracted at substantially lower levels. Future costs, the carriers contended, were particularly important, because the airlines had heavy demands for capital to equip themselves for the jet age. The carriers emphasized the uncertainties with respect to future borrowing rates and their debt-selling ability. On the other hand, several carriers had been unusually far-sighted and had secured substantial forward commitments from insurance companies for long-term funds.[45] This circumstance enabled them to have a low over-all future debt cost.

Bureau counsel contended that existing debt cost should be the primary guide and that future borrowing rates were conjectural.[46] An independent financial consultant for the BAO testified to a dual rate for the industry.[47] For the "Big Four" (American, United, Eastern, and TWA), four per cent was deemed a fair over-all cost of debt capital, after taking into consideration the cost of existing debt loan commitments, projected new borrowing, and the probable interest costs.[48] Debt costs for the smaller trunkline carriers varied considerably. The Bureau's witness concluded that 4.8 per cent was a reasonable group rate to use for these carriers, which in general did not have so good a credit rating.

2. *Cost of attracting equity capital*

Most rate-of-return cases center on the earnings which are necessary to attract equity capital for the utility on advantageous terms. Among the standards which have been used in this connection are these:

1. maintenance of earnings per share;
2. maintenance of established cash dividends;
3. allowance of sufficient earnings to maintain market price equal to book value;
4. allowance of sufficient earnings to maintain market price at some predetermined level above book value equal to or in excess of the stock's "acquisition cost"; and
5. maintenance of financial integrity.

Earnings should be sufficient so that additional shares can be sold under competitive conditions at a price which would not result in a material dilution of their book value. Stockholders in a business "affected with a public interest"[49] are entitled to a reasonable return on the sums invested therein. They are not entitled to earnings

[45] *E.g.*, in 1955, American contracted with Metropolitan Life Ins. Co. for $75,000,000, to be taken down over the next four years at a 4% rate, to run until 1996, a period of forty years.

[46] General Passenger Fare Investigation, No. 8008, Bureau Counsel Brief, CAB, Oct. 29, 1958, pp. 170-74 [hereinafter cited as BUREAU BRIEF].

[47] To assist the BAO with the financial aspects of the rate of return, the Board retained Paul Howell Associates, as independent financial and utility consultants.

[48] See HOWELL EXHIBIT § 3.

[49] Munn v. Illinois, 94 U.S. 113 (1877).

which would make the stock sell far in excess of the sums invested in the business, for that would exceed the competitive market supply price.[50]

a. *Market capitalization rates—earnings/price ratios.* The difficulty is that equity capital markets are never static. The orthodox approach to measuring what is necessary to induce investors to convert their free funds into airline equities relates the market price of airline shares to their concurrent earnings—that is, how much investors will pay for a dollar of earnings. The resulting earnings/price ratio is only a first approximation of the investor's asking price. Although these market ratios can be computed exactly, they may not reflect the true cost of attracting capital, except in a stable situation. In buying stock, investors are paying the present worth of all expected future earnings. What earnings expectation the investor has in mind is not known, nor is the rate at which he is capitalizing hopes or discounting risks. Even so, concurrent earnings/price ratios provide the foundation and the "best evidence" of the supply price for equity capital. Such ratios, when computed during a stock market boom, must, however, be used with great caution in attaining sound regulatory objectives.[51]

In long-established, stable enterprises, a quite precise determination of the market supply price can be made. Airlines, however, have only begun, since 1951, to achieve a self-reliant status independent of subsidy. Earnings/price ratios have been not only variable, but also considerably higher than those of the established electric utilities. Airline earnings/price ratios, rather than those of other utilities, should be given primary weight, since only they take into consideration the unique operating aspects of air transport, such as capital structure, operating ratio, earning and dividend record, competitive routes, technical obsolescence, occupational hazards, labor conditions, capital turnover, capital gains, and special legislation.

Matters like length of time to be reviewed, relative weight to be given to more recent market data, and comparisons with other companies are important in the measurement of the particular situation; but usually they do not involve conceptual difficulties.

It is relatively easy to come to a determination of a capital-attracting rate of earnings for a single company. More difficulties are involved when making such a determination for a group of companies, especially when they have such diverse records as the twelve trunk carriers. The Bureau's independent consultant concluded that the "Big Four" had sufficiently similar conditions for attracting capital so that they could be grouped together; and he considered that eleven per cent represented a

[50] *Cf.* Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of West Virginia, 262 U.S. 689 (1923).

[51] For a detailed discussion of the technical and financial application of earnings/price ratios to the measurement of the supply price of airline capital, see HOWELL EXHIBIT § 4. See also Zinbarg, *A Study of Industrial Common Stock,* The Analyst's Journal, Aug. 1959, p. 35, in which, after an elaborate statistical analysis, the "widespread practice of relating the current year's prices to the current year's earnings and dividends when utilizing the concepts of price-earnings ratios and yields" is endorsed.

fair market capitalization rate of expected earnings.[52] On the basis of earnings/price ratios which were much more dispersed, it was concluded that twelve per cent was a fair discount rate for the remaining eight trunkline carriers.

The statute requires a consideration of the needs of each carrier. In general, the smaller carriers have poorer earnings and dividend records, and consequently greater costs of raising capital. The important thing for some of them was not whether their cost of attracting capital was fifteen per cent, as asserted, but whether they could even earn eight per cent with any degree of regularity in competition with other transport agencies.

The fundamental problem of how to implement a two-level rate of return, so that the weak carriers could earn more than the strong carriers, which have a lower cost of capital built into their rate of return, was left by the CAB to forthcoming proceedings on fare structure. The analogous weak-and-strong-railroad problem has not been dented by the ICC since the passage of the Transportation Act of 1920. As for the airlines, the basic solution seems to lie not in fare structure, but in the modification of competitive conditions, route structures, and mergers. Many felt, for example, that the solution to the problems of Northeast Airlines did not lie in an attempt by a weak carrier to penetrate the highly competitive Miami route on its own, but instead in penetration by a merger with National Airlines.[53]

A technical matter, almost unique to airlines, is the handling of capital gains and losses in determining what earnings figures should be used in computing or calculating earnings/price ratios. Some carriers have been quite remiss in not pointing out in their annual reports the nonoperating character of a substantial portion of the reported "net income" per share. Many investors are not fine-print reading professional analysts, but rely on the earnings as given by the carrier to the financial press. During the 1956 General Passenger Fare Investigation, no adjustment was made by some witnesses to eliminate capital gains from reported earnings. The Bureau counsel's witness testified, however, that a "fair and reasonable rate of return"

[52] HOWELL EXHIBIT § 4. As of 18 months later (May 1959), the pertinent financial data for the "Big Four" were as follows:

Carrier	*Book Value 1/1/59*	*Market Value 5/15/59*	*Reported Earnings for 1958*	*Dividends Paid*	*E/P Ratio*
American	$15.62	$30.	$1.07	$1.00	6.56%
Eastern	35.45	41.	2.34	1.00 2% stk	5.71
United	35.43	38.	4.04	0.50	10.65
TWA	16.51	21.	0.26 Def.	—	—

American, Eastern, and TWA were affected by strikes and bad weather in 1958.

[53] New York to Florida Route, No. 3051, *et al.*, Order No. E-10645, CAB, Sept. 18, 1956 (see dissenting opinion).

should be based on net operating profits without regard to the remote contingency of uncertain net capital gains at some time in the future.[54]

b. *Adjustment of earnings/price ratios to allow for "costs of acquisition" of additional airline equity.* Ordinarily, additional equity financing can only net the company treasurer something less than the market price of the outstanding shares. These lower net proceeds reflect the "cost of acquisition" and are accounted for by company cash financing expenses, underwriting commissions, noncash discounts to allow for market pressure of the additional shares being offered, and possibilities of a break in market prices.[55] True "cost of acquisition" does not include any allowance for large discounts when share subscriptions are offered to existing stockholders at prices far below the market.

The *true* capital-attracting rate of return is the earnings/net proceeds ratio. Since frequently such data are not available, the market capitalization rates—the earnings/price ratios—are used as a starting point, and an adjustment is made for the "costs of acquisition." To finance on "advantageous terms" means that earnings must be sufficiently high so that new shares can be sold without impairing the position of existing security holders—to net the treasurer at least book value under normal conditions.

Witnesses during the 1956 General Passenger Fare Investigation differed widely in their concept of "underpricing" and in methods of adjusting the earnings/price ratios therefor. Their final allowances, however, were quite close together, ranging from a ten per cent to a fifteen per cent increase of the earnings/price ratios. As to the adequacy of this adjustment, it may be noted that Pan American World Airways, vigorous in espousing its own cause, contended for no more than a fifteen per cent underpricing allowance.[56] In general, an adjustment of fifteen per cent should accomplish the following:

1. enable airline stocks to sell at prices which average fifteen per cent above book value;

2. enable the "net proceeds" of future sales, under ordinary competitive conditions, to exceed book value and thus prevent dilution;

3. provide adequate margin for out-of-pocket costs and the noncash costs of floating equity shares; and

[54] With respect to local carriers on subsidy, the Board, with two members dissenting, has taken the position that capital gains must be considered in the over-all picture (as other income) in setting mail rates on a noncost basis. Capital Gains Proceeding, No. 7902, Order No. E-12855, CAB, Aug. 1, 1958.

[55] Howell, *Competition in the Capital Markets,* Harv. Bus. Rev., May 1953, p. 83.

[56] ". . . . Another factor which has an important bearing on Pan American's ability to sell stock on fair terms is the relationship between the market value and book value of Pan American's stock. It is a fundamental rule of public utility rate regulation that public utilities must be able to sell additional capital without diluting the value of the shares already outstanding. Since certain expenses are involved in a stock issue, and since any new issue must, for practical reasons, be priced somewhat below the market, it is a good rule of thumb that stock must sell on the market at no less than 115% of book value for the company to be able to net book value on a new issue." Testimony of R. G. Ferguson, Treasurer, Pan American World Airways, Capital Gains Proceeding, No. 7902, PAA Exhibit, CAB, Oct. 1956, p. 16.

4. more than offset any dilution of earnings, since the adjusted rate of return is applied to all the equity and not just the new shares.

Serious questions may be raised as to whether the entire "cost of acquisition" differential should be used to raise the earning rate on all equity, including stock which has already been issued. Much equity of the airlines was obtained at no financing cost, through retained earnings. Additional airline equity was obtained through convertible securities, which have a substantially lower financing cost. Is it necessary, in order to compensate for the fifteen per cent cost of acquisition which may be incurred in raising twenty-five per cent more equity, that the earning rate for the equity capital already acquired be also increased by this same amount? And how much, if any, "cost of acquisition" allowance is necessary when no new equity financing is contemplated? Notwithstanding these considerations, the Bureau counsel's witness concluded that a fifteen per cent increase of the earnings/market price ratios was equitable as a long-term industry allowance for "costs of raising equity capital."

c. *Conclusions on cost of equity capital.* Using these premises, the supply price of equity for the "Big Four" airlines would be computed as follows:

1. Earnings/market price ratio	11.0%
2. Cost of equity acquisition allowance	15.0%
3. Supply price of equity capital (11.0%/.85 = 12.9%)	12.9%

Accordingly, Bureau counsel argued that 12.9 per cent was an objective measure of the cost of equity capital for the "Big Four" airlines and would enable them to attract equity capital on advantageous terms.[57] Similarly, it was found that the supply price of equity capital for the smaller trunklines was 14.1 per cent.[58] These, of course, are not mathematically precise determinations, but merely indicate the midpoint of a zone or range of attractiveness.

3. *Determination of appropriate airline capital structure for rate-making purposes*

A major problem in using the "supply price" of capital in determining a fair and reasonable rate of return is the fact that various types of securities have different supply prices. In fact, giving effect to federal income tax rates of fifty-two per cent, it is found that airline equity capital is six to eight times more expensive than debt. Different capital structure proportions will, therefore, result in different over-all costs. What, then, is a reasonable or appropriate combination of the various types of securities under economic and efficient fiscal management? Basically, the appropriate structure is a compromise of the following factors:

1. the relative cheapness of debt securities; and
2. the need for an adequate margin of safety to maintain financial integrity.

[57] See HOWELL EXHIBIT § 4; BUREAU BRIEF 174-85.
[58] *Ibid.*

In the rate-of-return proceeding, the carriers urged a low debt ratio ranging from twenty-five to thirty per cent. The actual and prospective debt ratio, however, should be accorded careful consideration. The public should not have to pay the costs of a conservative debt structure and then not get what it pays for. Where the regulating authorities do not have control over financing, as they do not for airlines, they need not be bound by the actual structure.[59]

For group rate-making, the capital structure must necessarily be a workable compromise. Such a compromise need not be stigmatized as "hypothetical" or "theoretical," and can be "fair and equitable." Debt ratios vary greatly among carriers and over time. Airline debt has ranged from over 100 per cent for Capital to zero for Braniff. The regulatory authority must necessarily take a long-run, forward-looking, cross-sectional approach. At the hearings, the near-term capital structure for the "Big Four" was projected as approaching fifty per cent, and the remaining eight carriers projected a debt ratio of over fifty per cent.[60]

According to a fundamental canon of finance, the capital structure must be so set up that fixed charges can be covered at all times with a margin of safety. Coverage of senior charges is usually measured (a) in terms of "earnings available for fixed charges," or (b) on a "cash flow basis." In the case of the airlines, this "cash flow basis" is extremely significant because of the heavy depreciation write-offs.[61] Margins by which charges should be covered are subject to differences of opinion and can be reviewed in textbooks on security analysis and bond investment.[62]

Among factors which indicate a strong future for air-transport business, and consequently an ability of the carriers to support substantial debt, are these:

1. speedy air transport is an essential for modern business and social life, as well as for national defense;

2. airline revenues have demonstrated great potential;

3. the Federal Aviation Act is promotional in objective and character; and

4. administratively, the air transport industry will not be permitted to "go to pot."

[59] See BUREAU BRIEF 196-200 for citation of authorities. For a "hands off" position on administrative control of airline finance, see Murray, *Regulation of Airline Securities*, Harv. Bus. Rev., May 1950, p. 71. See also, testimony *Hearings*, *infra* note 64 *passim*.

[60] Extensive carrier projections are summarized in HOWELL EXHIBIT § 5. See also BUREAU BRIEF 186-96.

[61] *E.g.*, Eastern Air Lines has long followed a policy of writing off flight equipment in four years and at the same time accumulating a heavy overhaul reserve. When the equipment is sold, frequently at a price substantially higher than depreciated book value, the overhaul reserve is credited directly to surplus and thus becomes a hidden profit not reflected in the income statement. American Airlines is currently depreciating its piston equipment with the objective of complete replacement by 1961. It has been held that the CAB is not empowered by statute to promulgate rules governing depreciation rates and policies. Alaska Airlines, Inc. v. CAB, 257 F.2d 229 (D.C. App.), *cert. denied*, 358 U.S. 881 (1958). For the BAO's argument for a seven-year depreciation period for piston equipment, see BUREAU BRIEF 139-61.

[62] See, *e.g.*, BENJAMIN GRAHAM & DAVID L. DODD, SECURITY ANALYSIS (3d ed. 1951); RALPH E. BADGER & HARRY G. GUTHMANN, INVESTMENT PRINCIPLES AND PRACTICES (4th ed. 1951).

Experienced and informed finance officers charged with the fiduciary responsibility of safely handling other people's money have seen fit to make large and long-term loans to the airlines. It must be their considered judgment that these carriers are sound.[63] Responsible airline managements, despite arguments of counsel and witnesses, have endorsed substantial debt ratios by (a) actual overt borrowings which, if excessive, would endanger the financial integrity of the carrier; and (b) by public statements on a number of occasions.

Officials have testified as to the appropriateness of substantial debt ratios for the industry. President W. A. Patterson of United Air Lines stated:[64]

> . . . 40% debt ratio is not an unreasonable ratio. . . . Debt capital has a definite and logical place in airline finance. Airline management should make use of debt, preferred stock and common equity capital in such proportions as to obtain the lowest cost for its total new capital requirements consistent with good conservative financial practice.

He emphasized the heavy depreciation cash throw-off, the higher cost of equity capital, the need to prevent dilution of earnings, and the essential nature of the industry.

Delta Financial Vice President T. G. Cole testified:[65]

> It is our objective in looking at the years immediately ahead of us, the years that will see the acquisition and introduction of jet aircraft, to develop a capital structure of roughly 50 per cent equity and 50 per cent debt.

The Bureau's independent financial consultant testified that a forty per cent debt ratio was, when viewed from long-term considerations, financially sound and a fair balance of the interest of investors and consumers. Taking a forty per cent debt ratio with a four per cent debt cost, a 12.90 per cent equity cost, and a fifty-two per cent federal income tax, the fixed charges are covered more than eleven times. Coverage, after income taxes, would be six times.[66]

Bureau counsel, however, on the ground that prospective debt ratios would exceed forty per cent, urged the CAB to employ a forty-five per cent debt ratio for the "Big Four" trunk carriers. Also, on the basis of prospective debt ratios, Bureau counsel urged adoption of the less conservative debt ratio of fifty per cent for the smaller and weaker trunk carriers.[67]

[63] Most airline debt has been negotiated privately with insurance companies and commercial bankers, who should be skilled negotiators. Similarly, the investment bankers who underwrote debt issues offered to the public should be keenly interested in the ability of the airlines to service their obligations.

[64] Testimony of William A. Patterson President, United Airlines, in *Hearings Before the Senate Committee on Interstate and Foreign Commerce on S. 2647, Revision of Civil Aeronautics Act*, 83d Cong., 2d Sess. 933-34 (1954); see also testimony of C. E. Woolman, President, Delta Airlines, echoing similar views. *Id.* at 935.

[65] Testimony of Todd G. Cole, Financial Vice President, Delta Airlines, Suspended Passenger Fare Increase, No. 8613, CAB, April 5, 1957, pp. 205-06. Also, R. G. Ferguson, Treasurer, Pan American World Airways, testified: "I believe that Pan American should not be forced to rely on debt for more than 45% of its total capitalization, that even this should continue only for short periods immediately following equipment delivered and that the goal should be to have in debt not over 40%, and perhaps even less." Capital Gains Proceeding, No. 7902, PAA Exhibit, CAB, Oct. 1956, p. 14.

[66] See HOWELL EXHIBIT § 5 and table V-2.

[67] BUREAU BRIEF 186 *et seq.*

4. *Over-all capital-attracting rate of return*

Combining the debt and equity components on a forty-sixty basis, an over-all supply price of capital of 9.34 per cent for the "Big Four" carriers results, as is shown in table one. Based on these calculations, a zone of reasonable rate of return might

TABLE I

COMPUTATION OF COST OF CAPITAL FOR BIG FOUR

Type of Security	*Capital Structure*	*Security Cost*	*Weighted Cost*
Debt	40.0%	4.00%	1.60%
Equity	60.0	12.90	7.74
Over-all Rate	100.0%		9.34%

range from 9.0 per cent to 9.7 per cent. These carriers account for about three-fourths of domestic trunkline revenue-passenger-miles. Similarly computed, the fair and reasonable rate of return for the smaller eight trunkline carriers was found to be 10.38 per cent, or about one per cent higher than that of the "Big Four."[68]

Bureau counsel argued for a somewhat lower rate by using the actual debt ratios forecast by the carriers. A projected debt ratio of forty-five per cent gave an over-all return of 8.90 per cent for the "Big Four"; and a ratio of fifty per cent for the eight smaller (and weaker) trunk carriers resulted in a capital-attracting rate of return of 9.45 per cent.[69] Most of the carriers contended for a rate of return in the neighborhood of twelve per cent.

V

OTHER ASPECTS OF FIXING AIRLINE RATES

In authorizing the 1956 General Passenger Fare Investigation, the Board stated that it should be confined to a consideration of the general level of rates.[70] Questions of the competitive relationship of carriers, the structure of individual tariffs, discrimination, and so forth, were to be left to subsequent proceedings. But what started out to be a rate-of-return study has blossomed out to include many other

[68] HOWELL EXHIBIT § 6.

[69] BUREAU BRIEF 186-200. In setting mail subsidy rates for Mohawk Airlines, a local-service carrier, the Board, following the recommendations of the BAO, used 9.50% as the cost of capital. This figure was derived from a debt cost of 5.73%, an equity cost of 14.47%, and a capital structure consisting of 55% debt. See Mohawk Airlines, No. 7277, Opinion and Order No. E-12917, CAB, Aug. 28, 1958, and *id.* Order No. E-13202, Nov. 26, 1958. The present writer, as a financial analyst, takes strong issue to the CAB's use of a heavier debt ratio for a weak subsidized local service than for the trunk lines. In the *Mohawk* case, CAB member Minetti dissented, urging continued use of the old administrative 8% return until a decision is reached, after a careful study of the merits, in Rate of Return of Local Service Carriers, No. 8404, Order No. E-10843, CAB, Dec. 10, 1956, a proceeding initiated over three years ago and still awaiting an examiner's initial decision. In the reopened Delta-C&S Mail Rate Case—Initial Decision, No. 2564, CAB, June 20, 1957, p. 2, Examiner Stodola found the cost of attracting capital to be 9.66%. For administrative determinations, he used a 10% return on investment.

[70] General Passenger Fare Investigation, No. 8008, Order No. E-10488, CAB, July 27, 1956, p. 2.

things necessary to a sound determination of the character and quality of earnings available. Among these are:

1. the adoption of a uniform fare level for all carriers;
2. the strong and weak carrier problem;
3. efficiency of operations and appropriate load factors;
4. stability and growth of earnings and elasticity of demand;
5. expense allowances and depreciation of piston equipment;
6. rate base, depreciation residual, construction deposits, and working capital allowances;
7. treatment of capital gains on sale of piston equipment; and
8. usefulness of piston data for jet operation projections.

A discussion of some of these is beyond the scope of this paper.

A. Inadequacy of the Operating-Ratio Approach

Half the carriers urged that the Board, in fixing rates, should place major, if not complete, reliance upon the operating ratio as a means of fixing just and reasonable rates. Little was said about "just and reasonable rate of return."[71]

The Board, by statute, is charged with the duty of "promoting" the industry. For carriers, the end objective is rates which will enable them to attract the necessary capital for buying modern jet equipment. To do this, uncommitted investors must consider the earnings sufficient to provide a fair return on their capital investment.

Operating ratio provides no guide to the supply price of capital—bonds or stock—and so it falls short of the market. Many investors have no idea what the operating ratio is. It varies a great deal from industry to industry, and also as to what items are included in its computation.[72] Investors are interested in the return on their invested capital; there is no way of getting around that, and especially for an expanding utility. This earnings determination has to be made, and use of the operating ratio does not eliminate it. Every operating ratio ends up with some sort of return on capital. Indeed, questions of capital turnover are merely subordinate to the major end—the return on investment.

If the operating ratio provides a return below that which attracts capital, great agitation will soon arise to change it to provide a rate attractive to investors. If the operating ratio, as set, provides more than a capital-attracting rate of return, it then becomes merely a device to obscure or camouflage an unconscionably high return on investment.

[71] See exhibits, related testimony, and briefs of Braniff, Capital, Western, Continental, Delta, and Eastern.

[72] See MOODY'S MANUAL OF INVESTMENT, PUBLIC UTILITIES ix (1957). With such diverse depreciation practices as those utilized by Eastern, United, and American, a single operating ratio would be meaningless. See note 61 *supra*. Also, the treatment for tax purposes of "accelerated depreciation" pursuant to INT. REV. CODE OF 1954, § 167 varies considerably. In this connection, see the discussion and statement of policy about accelerated depreciation in Treatment of Accelerated Amortization and Liberalized Depreciation Under Sections 167 and 168 of the Internal Revenue Code for Rate of Return, No. 17818, N.Y.P.S.C., March 30, 1959. See also Central Maine Power Co. v. Pub. Serv. Comm'n of Me., 153 Me. 228, 21 P.U.R.3d 321 (1957).

To get a proper operating ratio would require even more detailed and tedious computations than would a straightforward rate-of-return approach. There could be no short cut effected merely by borrowing an operating ratio from some other industry, as was suggested by some of the airline testimony.[73] Administrative procedures would not be lessened. Just as many fare changes would have to be made with use of operating ratio as with a cost-of-capital approach.[74] The operating ratio approach is essentially a "cost plus" concept. Such a concept has many infirmities, the chief of which is that there exists little incentive to efficient and economical operation. Such a procedure is hardly justifiable in peacetime.

The significant question is not what is an appropriate operating ratio, but instead, what should be the "end result"? The operating-ratio approach, so far as indicated by the carriers' statistical exhibits, is incomplete. No objective data are presented to show what the operating ratio for air carriers should be, and why it should be at this particular level. A high operating ratio or high capital turnover does not automatically mean higher risk. The operating-ratio approach gears profit to volume of business and not to efficiency, the amount of capital dedicated, or the supply price of that capital.

B. Efficiency of Operations and the Load Factor

The carriers are entitled to a reasonable return under "economical and efficient management." The difficulty, of course, is the old one of finding adequate standards to measure efficiency. In the case of airlines, with varying routes and traffic patterns, this is quite complicated.

In determining fare levels needed to produce a reasonable return on capital, one must consider the appropriate utilization of plant capacity. Utilization of an aircraft can be broken down into three parts: (a) the number of hours the aircraft is in use; (b) utilization of the interior—*i.e.*, seating configuration or number of seats installed; and (c) utilization of installed seats, or load factor. Most attention has been fixed on utilization of installed seats.

At the outset, the question must be faced: Upon what load factor should fares be predicated in setting rates? A carrier with a high load factor can make a high rate of return even though fares are very low. In contrast, if utilization of seats is low, the company will lose, no matter how high its fares.

How heavily, managers must ask themselves, should the carrier saturate a given route with schedules in relationship to available traffic? Frequent schedules generate more business, but at diminishing returns. Likewise, if there are competitors on the route, how much equipment should be utilized to duplicate the other schedules in order to get traffic away from them. This could turn into cut-throat competition.

[73] See Rickenbacker, *The Operating Ratio as a Yardstick for Measuring Airline Profits*, 20 J. AIR L. & COM. 253 (1953). For a critical comment, see Grossman, *Reasonable Operating Ratio Versus Fair Rate of Return*, 21 J. AIR L. & COM. 15 (1954). For a general discussion of the use of the operating ratio by the ICC in motor-carrier regulation, see AITCHISON, *op. cit. supra* note 6.

[74] For a thorough analysis of the shortcomings of the operating ratio approach, see Knappen, *Transit Operating Ratio—Another View*, 51 PUB. UTIL. FORT. 485 (1953).

The Board has said, however, that the carriers will have competition, that they must learn to live with it, and that fares must be based on a reasonable load factor.[75]

If air transport is to be promoted, it needs to have many available seat miles; on the other hand, the seat miles can only be filled by keeping fares down. This situation, of course, brings up the question of elasticity of demand. A direct conflict arises between raising fares to cover costs,[76] and the need for keeping fares low to fill the seats and thus spread overhead.

One way to improve the over-all load factor is to get rid of poorly utilized piston equipment as rapidly as possible. The CAB staff has contended that fares should be based on a load factor of about sixty-three per cent, the average for the five-year period, 1953-58. The industry has urged the adoption of no higher than sixty per cent. At any given time, the annual load factor will vary as much as ten percentage points among different trunkline carriers. If fare levels are set to make operations profitable to the majority of the business—three-fourths of which is done by the "Big Four"—it may make profits extremely skimpy for poorly situated carriers. This, again, is the strong-and-weak-carrier problem, with which the ICC has been wrestling for some forty years.

C. The Treatment of Aircraft Construction Advances

When a property-rate base is used instead of an invested-capital base, great care must be taken with respect to the items included. Otherwise, the application of a market earnings rate to a nonmarket base will not provide earnings attractive to invested capital. All too frequently, regulatory commissions have been skimpy in their allowances for capitalization of return on work-in-progress, or in allowances for working capital during a lengthy construction period. The orthodox treatment excludes property from the rate base until it is put "on stream" and is rendering service. Current costs of construction, it is considered, should be capitalized and charged against future users of the property. When a railroad buys a locomotive, that is all taken care of in the purchase price. When an electric company builds a large power plant for itself, a credit is given to "interest during construction."

The airlines, like the railroads, have the construction done for them, but with a major difference. The aircraft manufacturers are inadequately financed and require substantial deposits as the construction progresses; these deposits for jet financing are large relative to total airline capital. Consequently, allowances for "nonproductive" deposits is a most important matter. For example, as of the end of 1958, "advances to suppliers for aircraft under construction" amounted to over $43,000,000 for Eastern Air Lines, or twenty-three per cent of net property and equipment.

[75] Suspended Passenger Fare Increase, No. 8613, Order No. E-11812, CAB, Sept. 25, 1957, pp. 29-33.

[76] A good deal of confusion exists in discussion of costs. Is it the cost of a unit being purchased—*i.e.*, a wage per hour or gallon of gasoline—or is it cost of unit being sold—*i.e.*, available seat-mile or revenue seat-mile? In general, although the unit cost of items purchased has been going up, the increased productivity of larger and faster aircraft has kept the seat-mile costs fairly stable. For a presentation of the BAO position concerning "elasticity of demand" for air travel, see BUREAU BRIEF 293-317.

Two important questions arise: Should the deposits and a reasonable amount of anticipatory financing (construction working capital) be included in the airline rate base? If not included in the rate base, what rate of return should be used to capitalize the construction investment?[77]

A regulatory commission's treatment of "interest during construction" is often inadequate. "Interest during construction" should not be limited to "interest rates" on borrowed funds, as is done by the Internal Revenue Service. The over-all capital-attracting rate of return should be used in capitalizing construction costs, regardless of whether there is heavy bank borrowing. If there were not substantial equity already in the business, bank borrowing would be impossible.

Furthermore, working capital allowances must be more substantial when heavy construction is going on. The cost of this money is a most legitimate expense of providing service to the public. If the Brandeis approach is used, these problems fade into the background. The total of the capital prudently invested is the true rate base and is the proper partner for a rate of return determined by the market supply price of free funds.

VI

PROMOTIONAL RATES AND JET AIRCRAFT FINANCING

The objective of the 1956 General Passenger Fare Investigation is to set fare levels which will encourage and promote expansion and utilization of service. In the present setting, this means fares which will enable the airline not only to attract capital to consummate their jet equipment program, but also to fill those jet airplanes with passengers.

Here the basic question is: Does the word "promote," as used in the Federal Aviation Act, apply to technology and service, or does it have some special application and meaning for finance? If rates and fares are sufficient to provide earnings which attract the necessary capital, is not the inquiry at an end? Does promotion with respect to finance mean something more? If rates are sufficient to attract capital, would not increased fares and earnings provide something more than is necessary? If adequate earnings are at hand, it has been demonstrated that airlines can attract capital on advantageous terms. The basic question has never been whether the carriers could finance on a twelve per cent but not on an eight per cent return. The carriers which have had difficulty are those which have not been able to earn a reasonable return measured by any standard. Carriers with poor earnings records, like Capital and Northeast, have not yet been able to order modern jet equipment, although each has been operating Viscounts for some time.

In setting rates, it is important to remember that consumers are passengers and are not a source of capital, which is to be furnished by investors. Consumers have an obligation to pay for the service or use of the capital; but they never get any

[77] See JAMES C. BONBRIGHT, PRINCIPLES UNDERLYING THE CAPITALIZATION OF INTEREST DURING CONSTRUCTION (1953).

dividends. Some utterances by industry spokesmen appear to confuse these distinct functions—one of furnishing the capital, and the other of paying for its hire.

VII

THE HEARING EXAMINER'S INITIAL DECISION

On May 27, 1959, Hearing Examiner Ralph L. Wiser, releasing his long-awaited Initial Decision in the 1956 General Passenger Fare Investigation, declared that 10.6 per cent was a fair and reasonable return for trunkline air carriers.[78] This was, indeed, a landmark decision, since this over-all rate is the highest ever to be granted since the beginning of effective regulation over fifty years ago.[79] Along with a companion decision of FPC Hearing Examiner Zwerdling as to return allowances for natural gas producers,[80] it constitutes required reading by serious students for contrasting approaches and "end results." In the space available, one can comment only on a few high points.

A. Debt Cost

Writing from the vantage point of twenty months after the preparation of exhibits, when interest rates were considerably lower, Wiser concluded 4.5 per cent and 5.5 per cent to be reasonable allowances for the cost of debt for the "Big Four" and the smaller eight carriers, respectively. The recent increase in the prime money rate and the New York Federal Reserve Bank rediscount rate, and the April 1959 sale by American Airlines of $70,000,000 of notes and subordinated convertible debentures at five per cent support this conclusion.

B. Cost of Equity Capital

Wiser concluded that the earnings/price ratio for the "Big Four" was thirteen per cent, to which he added two per cent for intangible factors. He similarly concluded that seventeen per cent was the cost of attracting equity for the smaller carriers. Wiser did not state what time period he was using, nor whether he included capital gains in the earnings figures. Neither did he indicate whether he would give more weight to recent market capitalization data than to the more distant high earnings/price ratios resulting from swollen temporary profits of the Korean traffic. Nor was his treatment of financing costs particularized.

Wiser then discussed the return on book equity of manufacturing corporations, without apparently realizing that this does not constitute a true market capital-attracting rate. This does not represent what investors will pay for a dollar of earnings. There are so many intangible factors involved, including wide variations

[78] General Passenger Fare Investigation, No. 8008, CAB, May 27, 1959, consisting of 187 pages of text (mimeographed), and 114 pages of appendix [hereinafter cited as WISER DECISION].

[79] See ARTHUR ANDERSEN & CO., RETURN ALLOWED IN PUBLIC UTILITY RATE CASES (1958).

[80] Matter of Phillips Petroleum Co., No. G-1148, Initial Decision FPC, April 6, 1959, a proceeding under §§ 4(e) and 5(a) of the Natural Gas Act, 52 Stat. 822, 823, 15 U.S.C. §§ 717c, d(a) (1952). See also Colorado Interstate Gas Co., 19 F.P.C. 1024 (1958).

in accounting practices of industrial companies as compared with regulated companies, that comparisons of earnings on book value have little significance. He further concluded that "air carriers are relatively comparable in risk to . . . manufacturing companies. . . ."[81] If this were so, it would have been far more appropriate to consider the earnings/market price ratios of such industrial companies rather than the return on loosely defined book value. The average earnings/market price ratios for manufacturing companies for the past five years[82] has been about 7.3 per cent.[83] For the period 1951-58, Moody's Manuals show it to be about 8.3 per cent. If Wiser had looked to immediately present and prospective future equity costs, as he did in the case of debt, he would find that his thirteen per cent earnings/price ratio allowance (ignoring his two per cent additional allowance for intangibles) was almost twice that of industrial concerns.

It is interesting to compare Wiser's results with that of other regulated enterprises. The degree of risk comparability must be left to the reader and to the market. FPC Hearing Examiner Zwerdling, in the celebrated *Phillips* case, found, following FPC staff testimony, that ten per cent was a reasonable cost of equity capital for gas producers.[84] Drilling for gas and oil has historically been considered the classic case of risk-taking, or speculative, enterprise. To find that a semimonopolistic public utility business, in an essential industry backed up by government subsidies, is as risky as gas drilling strains traditional views. To say that the cost of raising airline equity is fifty per cent more than that of the natural gas drilling business does not seem to reflect the relative economic facts. In this connection, it might be well to re-read the *Bluefield* case, quoted by Wiser:[85]

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the *same time* and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in *highly profitable enterprises* [leading manufacturers] or *speculative ventures* [gas].

[81] WISER DECISION 45. A recent study, SIDNEY COTTLE & TATE WHITMAN, CORPORATE EARNING POWER AND MARKET VALUATION, 1935-1955, at 35-37 (1959), indicates that there is also little or no relation between the level of price-earnings ratios and the rate of return on invested capital.

[82] Wiser frequently makes use of a five-year moving average.

[83] Moody's averages of 125 industrial companies shows the following earnings/price ratios:

1951	10.4%	1955	8.0
1952	9.5	1956	6.9
1953	10.1	1957	7.1
1954	8.7	1958	5.6

MOODY'S INVESTOR SERVICE, INDUSTRIAL MANUAL (1959).

[84] Matter of Phillips Petroleum Co., No. G 1148, Initial Decision, FPC, April 6, 1959. Because of a small amount of debt at 3.5%, the examiner concluded that an *over-all* rate of return of 9.25% was "fair and reasonable" for Phillips.

[85] Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of West Virginia, 262 U.S. 689, 692 (1923). (Emphasis added.)

C. Capital Structure

In determining the appropriate proportions of debt and equity to get an over-all return, Wiser used the "forward look"—the average forecast debt ratios, which were termed "the actual." These were forty-five per cent for the "Big-Four" and fifty per cent for the weaker carriers. Much is to be said in favor of the use of actual figures where it cannot be asserted there is an absence of economical and efficient management. Debt averages could be of the past, as in the case of equity ratios, or a mixture of past, present, and prospective. If weight were given to the recent past, the averages would be close to forty per cent. One must be careful to see that these prospective averages do not have the limitations of "spot" observations. It is, of course, financial topsy-turvy to use a heavier debt structure for weaker companies, and this could lead to the nonsensical result of a lower over-all rate of capital for poorer companies.

D. Over-all Rate of Return

On the basis of prospective capital structures, Examiner Wiser found an over-all cost of capital of 10.25 per cent for the "Big Four" and 11.25 per cent for the remainder; weighting them, he got 10.6 per cent for the industry. It will, indeed, be interesting to compare how the CAB and the FPC deal with the recommendations of their respective examiners. If the Board accepts Wiser's over-all conclusion of 10.6 per cent as a reasonable weighted fair rate of return for an industry that is now the largest common carrier of passengers in the world,[86] it will be the highest in history.[87] This will be in the face of the fact that the carriers managed to grow from weak operating and financial infancy to become a burgeoning giant, whose securities are actively recommended by leading investment bankers,[88] at a rate of return substantially less than 10.6 per cent. To say that the carriers now require 10.6 per cent to "carry on" just does not seem to reflect the economic facts.

E. The Operating Ratio

The operating-ratio approach was dismissed as containing many "subtle fallacies,"[89] for "the most significant test of a reasonable operating ratio shown in the record is whether it brings a fair return on investment thus making it impossible to avoid the necessity of reaching a finding on the latter whenever the conditions as to capital charges change."[90] The more complex the proceeding, the more efficient and equitable it is to reach this result directly, rather than to attempt it indirectly through an operating ratio approach, over which there is a great diversity of opinion and treatment.

[86] The 12 United States domestic trunk lines now carry more passenger miles (excepting commuters) than all United States railroads combined. This transportation amounts to nearly 30,000,000,000 passenger-miles per year and has gross revenues exceeding $1,500,000,000.

[87] It may be interesting to note, in passing, that since the beginning of regulation in the United States, no major rate-of-return allowance has exceeded 8%. During the past 25 years, none has exceeded 7%. See ARTHUR ANDERSEN & Co., *op. cit. supra* note 79.

[88] See special airline investment studies of Shields & Co., May 1959; Brown Brothers Harriman & Co., March 18 and 25, 1959; and Carl M. Loeb, Rhodes & Co., May 1959.

[89] WISER DECISION 74. *Cf.* Local Service Carriers, No. 8404, Initial Decision, CAB, July 13, 1959.

[90] *Id.* at 82.

F. The Load Factor

Wiser declined, as inconsistent with statutory mandate and Board policy, to fix standards of service such as a specific load factor of sixty-three per cent as requested by Bureau Counsel. Reliance should be placed "primarily upon competition rather than rigid Government imposed standards to develop advantageous quality and cost levels (which) will encourage development of productivity to the utmost."[91]

G. Rate Base—Construction Advances

As urged in the early part of this paper, Wiser follows the logic of the Brandeis approach that the rate base depends on capital which is committed to utility service. He, therefore, includes aircraft equipment construction advances.

EPILOGUE

The handing down of the examiner's opinion, over one-half a year after the filing of briefs, marked merely another step in a protracted proceeding. Thereafter, briefs were, again, filed, and oral argument was held before the Board on July 28-29, 1959. Since then, two of the five commissioners have resigned, and the resignation of another is expected momentarily. This may necessitate a re-argument and a decision by a new and inexperienced Board on one of the most important cases ever brought before it. Following a delayed Board opinion, the matter may then possibly be judicially reviewed. By this time, however, the industry will have been well launched into jet air operations, and both the economic and the operating data will be obsolete. Jet costs have already been demonstrated to be less than those of the latest piston-operated aircraft,[92] and there are strong indications that "available seat-miles" will be coming out of the carriers' ears unless new markets are tapped.

Rate of return, like other regulatory matters, to be effective, should be a continuing and up-to-date matter. It should be carefully reviewed every three to five years. But if a rate proceeding takes several years, there is a breakdown. There should, at least, be a breathing spell between rate cases. The 1956 General Passenger Fare Investigation has been essentialy a "trial by combat," with everyone insisting on his legal rights, little cooperation, the assumption of exaggerated positions to bargain for something less, delaying tactics, extremely diverse positions of the carriers, and so on. Issues were tried in the press, became embroiled in general politics and congressional investigations, and there were even overtones from the White House.[93]

The proceeding lacked focus. It was months after the initiating order was drawn before the issues to be investigated were decided upon, and only after much wrangling discussion. Much of the lack of direction resulted from the lack of unity within the

[91] *Id.* at 121.

[92] In a formal address before the New York Society of Security Analysts, Oct. 23, 1959, Mr. C. R. Smith, President, American Airlines, stated: "We have proved to our satisfaction that the jet airplane can produce air transportation on a *more economical basis* than the historical costs for the DC-7." (Emphasis added.)

[93] *Hearings Before a Special Subcommittee of the House Committee on Interstate and Foreign Commerce on Legislative Oversight*, 85th Cong., 1st Sess. *passim* (1958).

Board itself as to what, if anything, should be done. Even intervening governmental agencies, like the Department of Defense and the General Services Administration, had no firm or cohesive policy in their participation. Budget appropriations for an adequate staff were lacking.

The 1956 General Passenger Fare Investigation has been too much of an omnibus case. Many matters should have been disposed of years before and a firm policy formed. Such a policy determination would have eliminated long ago issues like the rate base, allowable expenses, construction deposits, working capital allowances, depreciation periods, control over carrier accounts, and the treatment of weak carriers. This, in turn, would have simplified and expedited the determination of what return is necessary to attract capital. The present troubles are part of the growing pains of a new industry which is now "going into orbit."

REGULATION OF RETURNS TO TRANSPORTATION AGENCIES

NELSON LEE SMITH*

Regulation of the rates and fares of transportation agencies—like public control of the charges of public utilities, such as electric, gas, telephone, and water companies—manifests itself in two distinct, but interrelated, aspects: (1) determination of the permissible level of net earnings; and (2) establishment of the individual prices of the various services furnished, from which the revenues of the enterprise are derived. It is to the former that this article is addressed.

This is not to suggest that the problems of pricing specific services are any less difficult or less important, either to the public or to the enterprise. They give rise to a variety of economic and legal issues, involving allocations of costs, relative elasticities of demand and values of service, and questions of undue discrimination, prejudice, or preference, which can become quite complex and which, because of their competitive impacts upon the supplier and the user of the service, can be highly significant to both. Resolution of these issues ordinarily calls for latitude in the exercise of managerial ingenuity in the development of measures adapted to the circumstances of each situation, with the minimum of regulatory restraint required to prevent demonstrably uneconomic practices or unfairness to the public. But, however particular pricing situations may be decided, the over-all yield of the aggregate charges collected must be sufficient to cover all the costs of performing the service, including a net return to the owners of the business which, while not excessive when compared with results in similar undertakings, will induce capital to remain or flow into it in amounts adequate to maintain its economic health and to permit the growth which its role in the national economy requires.

Determination of the earnings levels which will meet these tests and merits of various measures used in such determination are matters which have been of major and continuing concern to regulatory agencies, courts, practitioners, business executives, financiers, and students of transport and public-utility economics since the early days of regulation in the United States. Extension of regulation into additional fields, the increasing complexity and time-consuming nature of regulatory pro-

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cedures, and the sustained inflationary pressures upon costs in recent years—which have led to rate-increase proposals reversing downward trends which had long prevailed in many regulated areas—all have operated to focus attention anew upon this aspect of rate regulation.

I

REGULATION IN A FREE ENTERPRISE SYSTEM

Traditionally, the establishment of regulatory controls in this country has been based on public acceptance of the view that the "invisible hand" of competition could not, for one reason or another, be fully relied upon to protect the public interest in the furnishing of services deemed essential to the individual and to the national welfare. The Granger legislation of the 1870's and adoption of the Act to Regulate Commerce in 1887[1] reflected public reaction to the monopoly power and abuses of the railroads in their virtually indispensable function of moving the products and commerce of a rapidly expanding economy. Likewise, the extension of similar regulatory controls at the state level to our major types of public-utility enterprises during the early years of the present century resulted from fears, or demonstrations, of the abuse of monopoly power by these essential businesses, which were often entrenched in their positions by grants of exclusive franchises. Subsequent additions of new types of businesses to the regulated group—such as the motor carriers and airlines in the transportation field—took place as they proved their value; assumption by the federal government of increasing regulatory responsibilities—in such areas as electric utilities, natural-gas pipelines, communications, and commercial aviation—reflects the growth of the interstate operations of these enterprises, the inherent limitations upon the ability of the states to control them effectively, and the predominance of the national interest, rather than any basic changes in the objectives and underlying philosophy of regulation.

In the light of this historical background, it is not surprising that the regulatory agencies have tended to carry over, at least initially, principles and procedures developed in older areas of control to enterprises newly added to the regulated group. This was largely true when the Federal Power Commission embarked upon the regulation of interstate natural-gas pipelines by applying precedents developed in the field of electric utilities, and when the Civil Aeronautics Board began its control of mail rates and subsidy payments by using, essentially, the "fair return" approach generally followed in public-utility regulation. Likewise, the emphasis upon rigid restriction of earnings to minimum levels is more understandable when regulation is thought of simply as a substitute for the beneficent action of classical competition in preventing the emergence of monopoly profits.

While such tendencies may be the natural outgrowth of an evolutionary process, they can become dangerous unless tempered by continuing examination of the economic characteristics and all the surrounding circumstances of the subject business.

[1] 24 Stat. 379, 49 U.S.C. §§ 1 *et seq.* (1952).

Such analysis may disclose departures from the assumed norm of public-utility behavior or the presence of competition to a degree sufficient to justify—and, in fact, to require—some relaxation of the urge to hold down profits through the imposition of unrealistically low ceilings fixed by public authority in accordance with out-moded concepts.

In our free-enterprise system, capital is not commandeered or moved by fiat from one employment to another. It is the opportunity to earn attractive profits, or to incur loss, that directs the flow of funds, whether in the form of new savings by individuals or institutions or in terms of dollars generated by businesses in the course of their operations, which are available either for re-investment in replacements or extensions of existing activities or for diversion into other activities. Thus, in the economy generally, the profit opportunity serves not only as a powerful incentive to internal efficiency, but also to monitor the flow of capital as among alternative uses.

Because of their obligations to render adequate service to the public, the transportation agencies and utilities are somewhat less free to alter the nature and extent of their operations than are the unregulated industries. And in some instances, as in the case of the railroads, a relatively high proportion of long-lived items of fixed plant may further inhibit the mobility of capital assumed in economic theorizing regarding the functions of the market place. Nevertheless, the capital outlays required in the regulated areas are of huge magnitude. Thus, the private electric utilities of the United States spent nearly $4,000,000,000 on construction in 1958, and by 1975 expect to have expended upwards of $100,000,000,000, in terms of 1958 prices, to treble the size of the industry.[2] The natural-gas industry spent about $2,000,000,000 on new capital additions in 1958 and estimates additional requirements to 1970 at $33,500,000,000.[3] In the communications field, the Bell System alone spent $2,200,000,000 on construction in 1958, of which $1,377,000,000 represented new capital.[4] Gross capital expenditure for road and equipment by Class I railroads in 1958 amounted to $700,000,000 and are expected to be only slightly less in 1959.[5] Outlays by other transportation agencies are estimated at $1,500,000,000 in 1958 and $1,900,000,000 for 1959.[6] Conversion of the airlines to jet operations calls for outlays for flight and related ground equipment in the order of $2,000,000,000 by the end of 1961; at the end of 1958, the firm orders of the domestic trunklines for additional aircraft and engines alone aggregated more than $1,380,000,000.[7]

Measured against the 1958 capital outlays of all American business—which approached $31,000,000,000—the investments of the regulated utilities and transportation agencies amounted to about one-third of the total. There are no indications that their capital requirements will become a significantly smaller factor in the national economy within the foreseeable future. Clearly, therefore, if these enterprises are to

[2] Address by Robert S. Quig, *Trends in Regulation*, before the New York Society of Security Analysts, Jan. 21, 1959, p. 1.
[3] *Ibid.*
[4] AMERICAN TELEPHONE AND TELEGRAPH CO., ANN. REP., 1958, at 2.
[5] Transport Economics, March 1959, p. 1.
[6] Transportation, March 31, 1959.
[7] Aviation Daily, April 3, 1959, p. 247.

secure the capital which they require, they must be able to afford investors opportunities for returns which are attractive when compared in all respects with those available from alternative uses to which their funds may be put.

II

THE FAIR-RETURN DOCTRINE

This truism—recognition that in our free economy all uses of capital compete for funds in the marketplace—underlies the development of the concept of the "fair return" from *Smyth v. Ames*[8] through the *Hope* case.[9] Whether the immediate thrust be the elimination of an unwarranted element of monopoly profit or protection of the regulated business in its opportunity to attract needed capital, the need exists for standards whereby the reasonableness and adequacy of the return to the owners of the property may appropriately be judged.

During the early decades of the present century, the principal points of controversy concerned the determination of the base to which the permissible rate of return should be applied: (1) what elements of property should be included as "used and useful" in serving the public; and (2) how the allowed items should be valued—whether in terms of the investment as measured by net original or historical cost, or at the present value of the property, determined by physical appraisals, or, more recently, by some form of statistical trending of asset values, in accordance with indices of pertinent price and cost data. With the passage of time, however, the "prudent investment" rate base advocated by Mr. Justice Brandeis in his separate opinion in the *Southwestern Bell Telephone* case[10] gained general acceptance by state and federal regulatory bodies and courts.[11] And with this shift of emphasis, came in-

[8] 169 U.S. 466 (1898).

[9] FPC v. Hope Natural Gas Co., 320 U.S. 591 (1944).

[10] In his language: "The thing devoted by the investor to the public use is not specific property, tangible and intangible, but capital embarked in the enterprise. Upon the capital so invested the Federal Constitution guarantees to the utility the opportunity to earn a fair return." Missouri *ex rel.* Southwestern Bell Tel. Co. v. Pub. Serv. Comm'n, 262 U.S. 276, 290 (1923).

[11] Within the last several years, there has been a considerable resurgence of advocacy of the use of "present values," both in the determination of the rate base and in the computation of depreciation charges, primarily as an offset to the attrition of the investment rate base under the pressures of continued inflation and the rising costs of replacements in kind under such conditions. See, *e.g.*, Guercken, *Regulation in the Age of Inflation*, Electric Light and Power, Feb. 15, 1959, pp. 53-57. And such efforts have met with some success in certain instances. *E.g.*, Iowa-Illinois Gas and Electric Co. v. City of Fort Dodge, 20 P.U.R.3d 159 (Iowa 1957); Missouri Water Co. v. Pub. Serv. Comm'n, 22 P.U.R.3d 254 (Mo. 1957).

It is, of course, true that powerful arguments can be marshalled from classical economic theory in support of using the present values of capital items currently required for production in computing the marginal costs, and prices, of goods sold in competitive markets, although it must be remembered that these values and costs would relate to a plant which might now be built by a competitor rather than to the identical plant now in eixstence. Nevertheless, the writer is quite skeptical of the probable success of such efforts on any very general basis. It would appear rather unrealistic to expect the regulatory bodies, after many years of persuading themselves, the courts, and the public of the virtues of the "prudent investment" approach in terms of administrative simplicity, certainty, stability, and the like, to reverse themselves completely and adopt procedures of valuation which they have condemned as hypothetical and wasteful. Likewise, the concept of depreciation as amortization of cost seems so firmly

creased attention to the equally important factor in the fair return-equation, the rate of return, which hitherto had been given scant analysis in the literature of rate regulation. Accordingly, the thrust in most areas of regulation has been directed increasingly toward efforts to find appropriate means of determining the rates at which net earnings on investment should be permitted, which has resulted in the widespread use of "cost of capital" studies for this purpose. Additionally, in the case of businesses—such as the motor carriers and airlines—where the ratio of annual expenses and revenues to fixed investments is so high as to make the net return a much smaller factor in the total cost of service than is true of most public utilities, there has developed a growing concern in the maintenance of an adequate margin of profit per revenue dollar, which has led to the advocacy and use, in some areas of regulation, of the operating ratio, or "all-expense" ratio,[12] as a test of the required level of charges.

As the Supreme Court pointed out in the *Hope* case, however, it is the "end result," not the method of reaching it, that is important as a matter of law; and this is equally true as a matter of economics. What is important—alike to the regulated enterprise and to the users of its service—is that there be an opportunity for earnings sufficient to attract capital, in competition with alternative investment opportunities, in amounts adequate to provide the volume and quality of service which the public requires. This is no more nor less than the principle stated by the Court in the *Bluefield* case,[13] when it recognized explicitly that fair rates of return must vary—from time to time, from place to place, and from utility to utility—in order to reflect the relative risk inherent in the business and current conditions in the money market and economy generally.

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imbedded in accounting and regulatory practice as to make unlikely the widespread acceptance of "economic depreciation" in rate-making.

This is not to say that studies of the present values represented by the property under consideration, and reconstructions of its depreciation accounts to show what would be needed to provide for replacement at current price levels, are without value in rate-level proceedings. On the contrary, they can be very useful in demonstrating to the agencies the impact of inflation and the necessity, therefore, for a careful look into the future, as distinguished from preoccupation with the past, in applying whatever principles and procedures they utilize in prescribing rates. But this is a different thing from expecting them to adopt the concepts of "present value" and "economic depreciation" per se.

[12] Including depreciation and all taxes with the operating expenses, but excluding interest, so that the resulting margin of profit corresponds in composition with the elements covered by the "fair return."

[13] Bluefield Water Works & Imp. Co. v. Pub. Serv. Comm'n, 262 U.S. 679 (1923). The pertinent language, at p. 692, is as follows:

". . . . A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. *A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.*" (Emphasis added.)

From the standpoints, therefore, of both law and economics, it follows that there can be no such thing as a single, fixed rate of return which is fair for all time or for all types of regulated enterprises, regardless of the investor's evaluation of the relative risks or attractiveness of each under the circumstances prevailing at the time. The fact that a return of six per cent on the net investment of an electric or gas utility in 1948 may have been entirely reasonable does not mean—or even suggest, without close comparative analysis of each situation—that this level of net earnings would be appropriate for an airline or motor carrier in the same year, or for any of these businesses ten years later.

Although rates of return allowed public utilities have tended to cluster within rather narrow ranges—with something in the order of six per cent for electric, gas, and telephone companies, and slightly less for water utilities, being fairly typical during the years since World War II[14]—there is nothing in the history or present status of the "fair return" concept which compels uniformity in this respect. Nor is there anything inherent in the "prudent investment" doctrine to support the exclusion of items of capital investment which have been honestly made in accordance with good business judgment and the requirements of the industry and times simply because, under different circumstances, items having apparent similarity to those in question may have been disallowed in the past. Finally, there is nothing in the development of regulatory principles to require that attention be limited mainly to the past, without realistic consideration of future probabilities—as to rate base, rate of return, and operating expenses, which must also be recovered from the public through the levels of charges collected for service—when rates are being fixed for application during a future period.

In sum, it is the writer's view that there is—or can and should be—sufficient flexibility in the implementation of our basic regulatory concepts, as they have evolved under the "fair return" doctrine, to meet the exigencies and economic requirements of the time and place. If there is failure in this respect, it is not the fault of the principles themselves, but defects in their application. This, in turn, could be due, in considerable degree, to inertia and the illusion that formulae and mechanistic accounting approaches can be substituted for the exercise of informed judgment in ratemaking. To overcome these attitudes and to devise effective means of making fully evident and understandable the distinguishing characteristics which underlie their individual revenue requirements are among the major problems of the regulated industries. In no area is this need more pressing than in the transportation field—and particularly in the case of the unsubsidized domestic trunk airlines as they now

[14] See ARTHUR ANDERSEN & CO., RETURN ALLOWED IN PUBLIC UTILITY RATE CASES (Supp. No. 2, 1958). In a recent case involving international telegraph traffic, the FCC concluded that a return of as much as 8½ per cent would be reasonable under all the circumstances. In the Matter of the Western Union Telegraph Co., No. 11953, Initial Decision Made Final, FCC, July 30, 1958, pp. 76-77, 117. In the regulation of the rates of "independent producers" of natural gas, the FPC has been using rates of return in excess of 9 per cent. See, *e.g.*, Matter of Phillips Petroleum Co., No. G-1148, Initial Decision, FPC, April 6, 1959, p. 227, wherein Examiner Zwerdling discussses various approaches to the problem and concludes that 9¼ per cent is fair under the circumstances.

enter upon the jet age. It is with their special problems and the means which they have utilized to demonstrate them that the balance of this article is largely concerned.

III

SURFACE TRANSPORTATION AGENCIES

Although it is believed that the present situation of the major domestic commercial airlines will afford timely and pertinent illustrations of many of the problems here under consideration, it would perhaps be well first to allude briefly to certain highlights in the recent history of rate-level regulation of other transportation agencies by the Interstate Commerce Commission.

In the case of the railroads, it has been years since there has been a determination of the general level of freight rates or passenger fares in terms designed to yield a fair return on investment. The effort has been to keep the level of charges in some kind of balance with constantly rising costs. Thus, in its 1957 opinion allowing general class rate increases amounting to twelve per cent and increases in other basic charges which were equivalent to fourteen per cent, twelve per cent, and nine per cent within the Eastern, Western, and Southern Territories, respectively, the ICC came to no conclusions regarding a proper return on investment.[15] After discussing at length various experienced and anticipated increases of costs, it pointed out that the permitted rate increases would simply recover estimated cost increases, and would have no undue adverse effect on the movement of traffic. It also referred to its statement some five years earlier that "judged by any standard, the rates of return earned or prospectively to be earned by the railroads . . . are substandard."[16]

Similarly, in permitting permanent increases of five per cent in coach fares and twenty per cent in first-class fares in Official Territory, again in 1957, the Commission's action was taken because the higher fares "will yield a substantial increase in revenue, of which the carriers are in need and to which they are justly entitled" and "are necessary in order that travel thereunder may make a fairer contribution to the revenues needed . . . ,"[17] in view of the passenger deficits shown on the record, rather than in terms of a fair return on investment.

In its regulation of motor carriers, also, the ICC has found it appropriate to depart from, or at least to supplement, the conventional "fair return" method by gearing the rate levels and returns allowed to their profit margins, or all-expense operating ratios —primarily because of their high rates of capital turnover (*i.e.*, high ratios of annual revenues and expenses to fixed investment).[18]

[15] Increased Freight Rates, Eastern, Western, and Southern Territories, 1956, 300 I.C.C. 633 (1957).
[16] Increased Freight Rates, 1951, 284 I.C.C. 589, 612 (1952).
[17] Increased Fares, Official Territory, 1956, 300 I.C.C. 239, 255 (1957). See also Railroad Passenger Train Deficit, No. 31954, Examiner's Proposed Report, ICC, Sept. 18, 1958.
[18] Increased Common Carrier Truck Rates in the East, 42 M.C.C. 633 (1943).

The Commission has explained its position as follows:[19]

> In industries where the amount of investment is large in relation to total costs, the rate of return on investment generally has been accepted as appropriate for determining revenue needs. In such industries the risk is related more to the investment and less to costs. On the other hand, where the amount of the investment is relatively small in relation to total costs, investment is not the primary factor in determining revenue needs. . . . The owners of motor carriers can hardly be expected to look to the return on the amount of their investment as an incentive where the principal risk is attached to the substantial greater amount of expense. This is not to say that the rate of return on investment, comparisons of net income to capital stock, of the relation of debt-free property to capital stock, and other financial comparisons or studies are not useful in an appraisal of the financial condition and progress of the motor carrier industry. But for the purpose of determining the need of increases in rates, the criterion must be the carrier's cost.

Among the state commissions, likewise, there has been a decided trend toward the use of the operating ratio, or profit margin, as the rate-making standard for motor carriers and transit companies. A recent survey of 154 such cases in twenty-three states, the District of Columbia, and Hawaii, between January 1947 and January 1957, showed that seventy-six attached prime importance to operating ratio, with an increasing proportion being decided on this basis toward the end of the period covered (ninety-two per cent in the thirteen months ending with January 1957).[20]

Because the typically high rates of capital turnover, low profit margins, and volatile revenues and expenses of the airlines make them resemble more closely, in these respects, the motor carriers and unregulated businesses generally than they do the regulated utilities and railroads, it has been suggested that for the airlines, too, the operating ratio be used as the yardstick in rate-making—either as a substitute for, or as a complement to, the fair-rate-of-return approach.[21] Indeed, in its early regulation of mail rates,[22] and more recently in its establishment of subsidy payments for car-

[19] Middle West General Increases, 48 M.C.C. 541, 552-53 (1948). See also County Bd. of Arlington County v. United States, 101 F. Supp. 328, 330-31 (E.D. Va. 1951); Increases, California, etc., 51 M.C.C. 747, 760-61 (1950); Investigation of Bus Fares, 52 M.C.C. 332 (1950); New England Motor Rate Increases, 66 M.C.C. 215, 218-20 (1956).

[20] See General Passenger Fare Investigation, No. 8008, American Airlines Exhibit No. 906, CAB, Sept. 13, 1957, and cases cited and excerpts set forth therein. For convenience, this proceeding will hereinafter be cited simply as CAB No. 8008, and American Airlines' exhibits therein as Exhibit No. AA—.

[21] Rickenbacker, *The Operating Ratio as a Yardstick for Measuring Airline Profits*, 20 J. AIR L. & COM. 253 (1953). *Cf.* Grossman, *Reasonable Operating Ratio Versus Fair Rate of Return*, 21 *id.* at 15 (1954).

[22] "A specified return on the carrier's investment which would enable that carrier to earn an amount sufficient to cover its capital cost would not be an inflexible *measure* of the fair and reasonable rate contemplated by the Civil Aeronautics Act; it would, however, constitute significant and valuable *evidence* to be taken into account in connection with the determination of such a rate. *Likewise, the relationship which the carrier's profit bears to its total revenues, would offer some evidence of reasonableness when considered in comparison with similar data of other industries of similar risk. In this connection the ratio between the carrier's investment and the volume of service rendered, when compared with the higher ratio prevailing in other public utilities, would also be a proper subject of consideration.*" American Airlines, Inc.—Mail Rate Proceeding, 3 C.A.B. 323, 337 (1942). (Emphasis added in the last two sentences.)

riers with particularly small rate bases,[22] the Civil Aeronautics Board has indicated that such a technique has its place.

There is, in the opinion of the writer, no fundamental conflict between the rate-of-return and the operating ratio, or profit-margin, approaches to rate-making. They are obviously, and arithmetically, interrelated; if any two of the three factors—capital turnover, profit margin, and rate of return—are given, the third is, in fact, predetermined.[24] Either method, can produce the same dollar return. As will appear below, each can perform a useful function in determining the proper level of airline earnings.

IV

The Airline Fare Case

As indicated earlier, the principal domestic airlines are now engaged in a major effort to demonstrate the peculiar economic characteristics of their business which should be taken into account in determining their revenue needs and the manner in which and the level at which a fair return should be established for them. This is in the General Passenger Fare Investigation, which was initiated by the CAB in mid-1956.[25]

A. Background[26]

As background for this proceeding, it should be borne in mind that at the end of World War II, the airlines were just emerging as a major factor in the nation's transportation system. In 1946, the domestic trunklines as a group[27] had an investment of $219,600,000. Their service was provided principally with DC-3 aircraft costing about $125,000 each, seating twenty-one passengers, and cruising at a speed of around 150 miles per hour. The DC-4, which cost $450,000, carried sixty-five passengers at a cruising speed of 180 miles per hour, and could make a transcontinental

[23] *E.g.*, Allegheny Airlines, Mail Rates, No. 6620, Order No. 9009, CAB, March 11, 1955, pp. 10-11; Central Airlines, Mail Rates, No. 4097, Order No. E-9669, CAB, Oct. 18, 1955, p. 8; West Coast Airlines, Mail Rates, No. 6391, Order No. E-10315, CAB, May 24, 1956, pp. 14-15.

[24] Dr. Herbert B. Dorau, testifying for Eastern Air Lines, Inc., expressed these relationships as follows, with R representing the rate of return, C the rate of capital turnover, and M the margin of profit (reciprocal of all-expense ratio):

$$R = MC$$

$$M = \frac{R}{C}$$

$$C = \frac{R}{M}$$

Thus, as he illustrated the matter, if the invested capital is twice the annual revenue (a capital turnover rate of 0.5) and the margin of return is 20% (an all-expense ratio of 80%), the rate of return must be 10%. CAB No. 8008, Eastern Air Lines Exhibit No. 1-R, Oct. 11, 1957, p. 7.

[25] CAB No. 8008, Order No. E-10279, May 10, 1956.

[26] The airline statistical data used throughout this section are derived from the Form 41 reports filed by the air carriers with the CAB.

[27] Now consisting of the following carriers: American, Braniff, Capital, Continental, Delta, Eastern, National, Northeast, Northwest, Trans World, United, and Western.

trip with two stops in about fourteen hours, was just coming into commercial service. In 1946, the trunklines carried domestically almost 12,000,000 passengers for a total of 5,900,000,000 revenue-passenger-miles (less than 6.5 per cent of the total intercity common-carrier market). They also transported some 71,000,000 ton-miles of mail and cargo. Their operating revenues, of which eighty-eight per cent came from passenger traffic, amounted to about $311,500,000, and they suffered a net loss, after taxes, of over $6,000,000. Nine of the sixteen then-existing trunkline systems received subsidy, aggregating $5,000,000.

By 1956, however, the net investment of the trunklines as a whole had grown to $900,000,000, representing a fleet of 1,100 aircraft and the related ground equipment necessary to operate and maintain them. They had introduced Convair and Martin equipment in the shorter hauls; in the longer hauls, they had introduced the DC-6 and the Constellation, followed first by the DC-6B and the Super-Constellation, and then in 1953-54 by the $2,100,000 DC-7, carrying sixty passengers in first-class or eighty-five in coach service at more than 300 miles per hour, and making the transcontinental trip nonstop in an average time (eastbound and westbound) of slightly over eight hours. Cabin-pressurization had been introduced and noise levels reduced, contributing to passenger comfort; many features, including radar, had been added in the interest of safety and dependability; reservation, ticketing, and terminal services were being constantly improved to increase the convenience of air travel; and low-cost coach service had been extended to account for thirty-seven per cent of the total passenger-miles.

During 1956, the domestic trunklines carried 38,000,000 passengers a total of 21,600,000,000 passenger-miles, an increase of 267 per cent over 1946, accounting for over thirty-four per cent of the intercity common-carrier market. This represented an annual growth rate of approximately fourteen per cent, as compared with 3.7 per cent for the economy as a whole, measured by Gross National Product adjusted to constant dollar values. Mail ton-miles had increased by 180 per cent to 92,000,000. Cargo and express accounted for 240,000,000 ton-miles, an increase of 485 per cent over 1946. Operating revenues amounted to $1,300,000,000, of which ninety-two per cent came from passenger traffic. Net earnings after taxes were $58,000,000 in 1956, as compared with a $6,000,000 loss in 1946. Before interest and net gains on the sale of equipment, the 1956 composite return of the domestic trunklines was nearly nine per cent on their net domestic investment averaged for the year. Just three of these carriers received subsidy, totaling only $2,600,000; and it was hoped that such payment to this segment of the industry could soon be eliminated completely.

The growth record of the airlines during this period is the more remarkable when it is realized that their expansion had been financed in large part from depreciation throw-off and retained earnings, with but relatively little resort to outside sources of funds. In 1956, for example, the trunklines retained in the business some $37,000,000, or about half of their net income from operations. Furthermore, through improved technology and managerial techniques, they had been able to overcome the sub-

stantial rise of the prices of the goods and services which they have to buy to operate and which have been under continuing inflationary pressures since 1946. Trunkline costs per available ton-mile (the unit of production) had been cut from over thirty-two cents in 1946 to 26.5 cents in 1956, and costs per revenue-ton-mile (the unit of sales) from nearly fifty cents to forty-seven cents.

The general fare level, as measured by average revenue per passenger-mile, stood at 5.28 cents for the trunklines in 1956, which was approximately its 1942 level. Although first-class fares had increased slightly, from 5.28 cents to 5.87 cents, this was offset by the expansion of coach service at an average yield of 4.28 cents in 1956. All this was in striking contrast to the movement of the prices of other transportation services and of commodities generally. Over the same period, average rail fares had increased thirty-nine per cent, intercity bus charges had risen twenty-nine per cent, wholesale prices had gone up seventy-nine per cent, and the cost of living, as represented by the Department of Labor's Consumer Price Index, had advanced by sixty-seven per cent.

B. Impacts of the Jet Age

Meanwhile, rapid strides were being made in the adaptation of the turbine engine to economical airline use. By 1955, the major airlines were beginning to place large orders for turbine-engined equipment, which not only promised new standards in the speed and comfort of air travel, but also confronted the airlines with problems of re-equipment financing which dwarfed anything that they had faced in the past.

The propeller-driven jet, as typified by American's version of the Lockheed Electra, costs in the order of $2,500,000 and carries sixty-eight passengers at about 400 miles per hour in the shorter hauls. The jet-driven equipment—including the Boeing 707, the DC-8, and the Convair 880 and 600—is designed for the longer hauls, costs upwards of $5,000,000, seats 100 passengers or more, and will cruise at speeds up to more than 600 miles per hour. With the jet, the time of the transcontinental nonstop trip is cut by forty per cent. Thus, at one stroke, an advance in speed is being accomplished equal to that achieved in the entire period since the introduction of the DC-3 in 1936. In addition, these new aircraft afford great improvements in passenger comfort, through reduction of cabin noise and vibration, better air-conditioning and ventilation both in flight and on the ground, more efficient baggage-handling, and the like. At the same time, the necessary maintenance facilities are being provided, terminals are being enlarged, and passenger reservation, ticketing, and handling procedures are being geared to match the speed and capacity of the jet equipment.

Highest official notice has been taken of the great importance of these improvements—in terms of service to the public, airline and general economic welfare, and the national defense—and of the successful transition of the airlines to the jet age.[28] To provide them, however, will require capital outlays which, in terms of firm

[28] Cherington, *Airline Equipment Investment Program*, H.R. Doc. No. 430, 85th Cong., 2d Sess. (1958).

orders placed by the domestic trunklines to date, will amount by 1961 to upwards of $2,000,000,000. To place this figure in perspective, it is over $500,000,000 more than the total outlays of these airlines for flight and ground equipment during the entire period, 1945-56; it is double their aggregate net worth at the end of 1956. And it is by no means unlikely that this sum will be substantially increased by further equipment orders before the transition to jet operations is fully accomplished.[29]

It was apparent, therefore, that even with earnings at the relatively favorable levels then prevailing, substantial outside financing would be required. Fortunately, the remarkable physical growth of the airline industry and the more satisfactory level and greater stability of earnings during the years 1950-55 made it possible for at least some of the stronger domestic trunklines to resort successfully to institutional borrowing. Thus, American was able to negotiate insurance company loans of $75,000,000 at four per cent in November 1955, and $60,000,000 at 4¼ per cent in September 1956. Other carriers were able, likewise, to arrange for a portion of their re-equipment financing through long-term loans, bank credits, and in a few instances through a limited amount of equity financing. Much more remained to be done, however. As late as June 1958, it was estimated that, giving effect to a projected flow of funds from all sources and assuming earnings at the rate of nine per cent on invested capital, the domestic trunk lines needed to arrange at least $636,000,000 of additional financing to cover their firm commitments, which were deemed subject to still further upward revision.[30]

C. Initial Stages of Proceeding

This was the setting in which the General Passenger Fare Investigation was launched in May 1956. The vigorous growth of the industry as a whole and the improved earnings position of the major carriers seemed to indicate an approach to a degree of financial maturity which, if these conditions could be continued, gave some promise of appeal to the investor. At the same time, the airlines faced a re-equipment program of a magnitude unparalleled in their history; and this gave unusual emphasis to the importance of maintaining their financial health.

During the early part of 1956, the CAB had been subjected to severe criticism by a congressional committee for its failure ever to have carried through to a conclusion any general investigation of the level of passenger fares or to have established guiding

[29] Although some of the required capital outlays, as in the case of airport improvements, are being made by public authorities, and hence are excluded from the total cited, these expenditures are ordinarily to be fully recouped through user payments under leases which give rise to fixed charges upon the airlines. Likewise, certain engine and propeller leases negotiated by airlines with the manufacturers operate to reduce the capital requirements of the airline, but correspondingly increase its annual charges. American, for example, reduced its capital requirements for the 110 turbine-engined aircraft which it has on order and the supporting ground equipment from $445,000,000 (nearly 3¼ times its net worth at December 31, 1958) to about $365,000,000 by leasing some $80,000,000 worth of powerplants and propellers for its Electras and powerplants for its Convair 600's and intermediate Boeing 707-023's. AMERICAN AIRLINES, INC., ANN. REP., 1958, at 1, 2, 10.

[30] Derived from Cherington, *supra* note 28, at 27.

principles in this area of regulation.[31] Not long thereafter, its order of investigation issued.[32]

The order referred to calculations by the Board's staff showing that in each of the preceding five years, 1950-55 inclusive, the trunklines had earned composite rates of return on their average annual net domestic investment of over ten per cent. It stated that unit costs had steadily declined, notwithstanding inflationary pressures on wage rates and the prices of materials, and that load factors during the last three years had become relatively stable at reasonably attainable levels in the range of sixty-three to sixty-five per cent. It cited the consistent and substantial traffic growth over the past ten years as support for the assumption that equally favorable conditions should continue. It concluded that an investigation into the general level of fares was required, with a view to determining what flat percentage changes in the fares of particular carriers or groups of carriers should be made. At the time, this was widely interpreted as foreshadowing an effort to effect a speedy reduction of airline fares.[33]

Factors were already becoming evident, however, which made both the performance and the outlook much less favorable for the airlines. With testimony and exhibits due to be exchanged early in 1957, and the hearings scheduled to begin in May, seven of the domestic trunklines filed for six per cent emergency increases of their fares, to become effective April 1, 1957.[34] These were promptly suspended and placed under investigation by the Board,[35] which thereupon, of necessity, deferred further procedural steps in its General Passenger Fare Investigation. On September 25, 1957, all the proposed emergency increases—estimated to yield some $67,000,000 for the domestic trunkline industry as a whole—were found by the Board to be un-

[31] "The most noteworthy failure of the Board to justify the presumption that underlies its creation has been in the realm of passenger fares. During its entire existence, the Civil Aeronautics Board has never concluded an investigation of the general level of airline passenger fares. Such an investigation is essential to develop the standards needed to enable the Board to determine whether the fares and charges in use by the airlines are unjust or unreasonable, discriminatory, unduly preferential . . . or otherwise unlawful. The failure of the Civil Aeronautics Board to complete a general passenger fare investigation has left a vacuum in its work during its entire existence with respect to the primary rate problems affecting commercial air transportation. On May 10, 1956, the Board started on its fourth attempt to conduct this essential investigation. The committee concludes it is essential that the Board proceed expeditiously in order to remedy as quickly as possible this deficiency in a major area of its responsibilities." STAFF OF ANTITRUST SUBCOM., HOUSE COMM. ON THE JUDICIARY, 85TH CONG., 1ST SESS., REPORT PURSUANT TO H. RES. 107, AUTHORIZING THE COMMITTEE ON THE JUDICIARY TO CONDUCT STUDIES AND INVESTIGATIONS RELATING TO CERTAIN MATTERS WITHIN ITS JURISDICTION, ON THE AIRLINES INDUSTRY 267-68 (Comm. Print 1957).

[32] CAB No. 8008, Order No. E-10279, May 10, 1956.

[33] Various lines of inquiry into the fare structure—particularly the relationship of short-haul and long-haul fares—were suggested for inclusion in the investigation. Following the receipt of written comments and oral argument as to the scope of the proceeding, the Board declined to broaden it, emphasizing its desire to proceed promptly with such over-all adjustments as might be indicated if the general fare level should prove to be excessively high. CAB No. 8008, Order No. E-10488, July 27, 1956.

[34] Braniff, Capital, Delta, Eastern, Northwest, Trans World, and United, with both Capital and Eastern seeking an additional increase of $1 per ticket. American subsequently joined in these filings for a 6% increase, although asserting that the proposed increases were grossly inadequate to meet the real need.

[35] Suspended Passenger Fare Increase, No. 8613, Order No. E-11135, CAB, March 15, 1957.

justified.[36] The Board recognized that unit costs had risen, profit margins had shrunk, and load factors had fallen, but it optimistically regarded these developments as temporary phenomena. It expressed the view that[37]

> . . . there is little doubt that the drop in earnings which the airlines have reported recently is due in large measure to new aircraft and new routes and the integration and developmental costs which ensue. Once these factors are absorbed into the carriers' operations it is reasonable to expect that their net effect will be higher earnings for the carriers receiving major route awards.

In arriving at its conclusion, the Board invoked both the eight per cent rate of return and the disallowance procedures which it had developed previously in mail-rate and subsidy cases.[38] Thus, for purposes of disposing of that proceeding, it added net capital gains on sales of used aircraft to the operating revenues subject to regulation, eliminated from the rate base the deposits which the airlines had made with manufacturers toward the purchase of new equipment, and lengthened the service lives and increased the residuals used by many of the carriers in calculating their depreciation charges on flight equipment. After making these adjustments, the Board showed 1957 rates of return substantially in excess of those forecast by most of the carriers.[39]

For American business generally, much of 1957 was a good period, and in a physical sense, the airlines shared in this growth. Passengers carried by the domestic trunklines increased to 43,000,000 for the year and revenue-passenger-miles to 24,500,000,000, sixteen and thirteen per cent, respectively, above 1956. Mail and freight also increased, the latter by fifteen per cent. Operating revenues rose twelve per cent, to $1,420,000,000. But the upward trend of unit costs, which had become apparent earlier, was even more pronounced. Operating expenses, including depreciation, amounted to $1,378,000,000, up nineteen per cent over 1956. Net earnings from

[36] *Id.*, Order No. E-11812, Sept. 25, 1957, *reconsideration denied*, Order No. E-12092, Jan. 8, 1958.

[37] *Id.*, Order No. E-11812, Sept. 25, 1957, p. 23.

[38] Early in the history of its determination of mail rates and subsidies, the Board had fixed upon 8% as the fair rate of return to be used for such purposes. Pennsylvania—Central Airlines Corporation, Mail Rates, 4 C.A.B. 22, 36 (1942). This same rate of return has been used in such cases involving determinations for the future (with 7% frequently used for past periods) until relatively recently, when, pending disposition of Rate of Return of Local Carriers, No. 8404, Order No. E-10843, CAB, Dec. 10, 1956, 9½% has been used as the interim fair rate of return, Mohawk Airlines, Inc., Future Final Mail Rate Case, No. 7277, Certification Served, CAB, March 13, 1959; New York Airways, Inc., Mail Rates, No. 10365, Order No. E-13748, CAB, April 16, 1959.

[39] The rates of return, as forecast by the carriers and adjusted by the Board, are shown as follows in Suspended Passenger Fare Increase, No. 8613, Order No. 11812, CAB, Sept. 27, 1957, p. 39, n. 44:

Carrier	*Carrier's Forecast*	*As Adjusted for Depreciation and Equipment Deposits*
Braniff	5.27%	7.26%
Capital	1.56	1.56
Delta	4.9	8.70
Eastern	0.85	14.30
Northwest	5.01	7.25
TWA	Loss	2.68
United	6.90	9.26

operations declined precipitously, by fifty-eight per cent, to $42,000,000, with three of the trunklines reporting deficits. There was growth in volume, but without profit.

Essentially, what was happening was this: After their long postwar record of offsetting rising prices with increased productivity, the airlines saw their costs per available ton-mile increase from twenty-six cents in 1955 to 26.5 cents in 1956 and 26.8 cents in 1957, with no reason in sight to expect a reversal of this trend. At the same time, the impact of the more extensive competition which the Board had authorized during the several preceding years was becoming more apparent and severe. The industry passenger load factor fell from 64.1 per cent in 1956 to 61.5 per cent in 1957. Together, these conditions operated to cause an increase of costs per revenue-ton-mile from 47.4 cents in 1956 to 50.7 cents in 1957. With fares held at their previous levels and an increasing proportion of coach travel (thirty-nine per cent of the 1957 passenger miles), the average passenger-mile yield declined to 5.25 cents in 1957, as compared with a further five per cent increase of rail fares, and with wholesale prices and the Consumer Price Index both rising three per cent above 1956. Airline profits were squeezed between the scissors' blades of rising unit costs and falling unit revenues.

This was the disturbing situation confronting the airlines when the hearings in the General Passenger Fare Investigation opened in mid-November 1957. These hearings continued into the summer of 1958, and briefs to the examiner were filed that autumn. It is likely to be some months more before the Board finally disposes of the case—perhaps about 3½ years after its inception.

Meanwhile, however, some measure of temporary relief has been granted to the airlines. Although it had rejected earlier their plea for an emergency increase of six per cent, the CAB subsequently recognized the continuing deterioration of earnings in 1957 and permitted an increase of four per cent plus one dollar per ticket, effective February 10, 1958, which, based on 1957 traffic, was estimated by the Board as amounting to approximately 6½ per cent and yielding about $85,500,000 before taxes annually.[40] Effective October 20, 1958, it permitted the elimination of round-trip discounts, free stopovers, and certain related routing privileges, as well as a reduction of the family fare discount from fifty to 33⅓ per cent—all of which could yield some badly-needed additional revenue.[41] And more recently, it has permitted the carriers which inaugurated jet operations to collect small additional charges for that service.[42] All the tariffs providing for these features were allowed to take effect without suspension, but were placed under investigation, and all were required to bear expiration dates.

[40] Interim Fare Increases, No. 9288, Order No. E-12203, CAB, Feb. 25, 1958. The Board, however, noted that the continued decline of business activity, the downturn of traffic growth, and the evidence of increased unit cost "augur less favorable operating results in 1958." *Id.* at 10-11.

[41] In the Matter of Passenger Fares Proposed by the Domestic Trunk Air Carriers, No. 9931, Order No. E-13066, CAB, Oct. 14, 1958, and CAB Press Release No. 58-64, Oct. 14, 1958. On an industry-wide basis, it has been estimated that these changes would increase passenger revenues by some 3.5 per cent.

[42] *E.g.*, Between New York and Los Angeles, $10; between New York and Chicago, $3; and between Chicago and Los Angeles, $7.

D. Main Issues

From the beginning of the General Passenger Fare Investigation, individual carriers have asked for over-all increases of from 12½[43] to seventeen per cent[44] above the levels of fares prevailing in 1957. Based on the traffic of that year, it was estimated that a fifteen per cent increase, which is the amount most frequently sought,[45] would increase industry revenues by about $193,000,000 and earnings after taxes by some $93,000,000. No member of the traveling public has objected, so far as the record discloses, to the proposed increases. They have, however, been opposed by the General Services Administration, and with great vigor by the staff of the CAB. Counsel for the Board's Bureau of Air Operations contended at the outset that no increase whatever should be permitted. Subsequently, this position was modified to concede that, because of the financial problems involved in the transition to jet operations, addition of the four per cent plus one dollar per ticket which the Board had allowed in February 1958 should be continued through June 30, 1960, and that thereafter a straight four per cent increase over the 1957 fare level should be approved.[46]

In support of their proposals, the different carriers have given varying degrees of emphasis to approaches through the determination of a fair rate of return and through the use of an operating ratio. Thus, United has contended for a return on investment of twelve per cent, with operating-ratio data used only as an indication of the debt ratio which would be supportable.[47] Eastern, on the other hand, has relied exclusively upon the all-expense ratio, advancing 92.6 per cent, or an operating margin of 7.4 cents, as the proper standard;[48] and a number of other carriers have given major weight to operating ratios of from eighty-five to ninety per cent.[49] American has utilized both measures of reasonableness, stressing the need for a twelve per cent rate of return as the primary test, but pointing out also that an operating ratio not exceeding ninety-three per cent is essential; a profit margin of less than seven cents per revenue dollar should be viewed as a danger signal calling for a re-examination of the fare level.

1. *Distinguishing characteristics*

Justification for rates of return about double those which had become traditional in the regulation of public utilities generally was found in the economic characteristics of the airlines, which distinguish them—particularly in the degree of risk involved—

[43] Braniff advocated increases ranging from 12½% to 18%.

[44] United; although Capital indicated a need for 20%

[45] American, Continental, Delta, Eastern, and Trans World.

[46] CAB No. 8008, Brief of Bureau Counsel to the Examiner, Oct. 29, 1958.

[47] See, particularly, *id.*, United Air Lines Exhibit No. U-4, Testimony and and Exhibits of David A. Kosh, Oct. 25, 1957.

[48] *Id.*, Eastern Air Lines Exhibit No. 1-R, Testimony and Exhibits of Dr. Herbert B. Dorau, Oct. 11, 1957.

[49] *Id.*, Joint Exhibit for Braniff, Capital, Continental, Delta, and Western Air Lines, Exhibits and Testimony of J. Rhoads Foster, Oct. 25, 1957.

from the conventional types of public utilities.[50] These factors include the essentiality of the service rendered, the extent of competition present, the rapidity of technological change, the rate of capital turnover and concomitant levels of operating ratio, the vulnerability of airline profits, and the instability of airline earnings. Each will be discussed briefly.

a. *Essentiality of service.* Although air transportation has gained recognition as playing a very important role in both the economy of the country and the national defense, it can scarcely be thought of as being as indispensable in every day life as are water, gas, electric, and telephone services, which people rely upon and use habitually, virtually taking them for granted as necessities of modern life. In this respect, the business of providing air transportation is inherently more risky than are the conventional public utilities.

b. *Competition.* Whereas the typical public utility at the local-distribution level is completely free—and at the wholesale level largely free—of competition, the trunk airlines compete intensely not only with other forms of transportation, but also among themselves. The Federal Aviation Act, to be sure, requires authorization of new route operations by the issuance of certificates of public convenience and necessity.[51] But, as interpreted by the CAB in recent years, these considerations have been deemed to require competition, and frequently multiple competition, in practically every major travel market. Thus, prior to 1955, 228, or nearly sixty per cent, of the 400 largest markets were noncompetitive; while in 1958, competition had been authorized in 348, or eighty-seven per cent of these markets. Before 1955, only thirty-eight of these city pairs had three or more competing carriers; by 1958, 115, or three times as many, had three or more authorized carriers, while twelve had five or more. In the fifty most important markets, accounting for about forty per cent of the total revenues, the average number of carriers had been increased from two to three.[52]

The presence of such extensive competition in airline operation increases the business risk[53] and also complicates the task of both the managers and the regulators of the industry—the former, by greatly increasing the difficulty of anticipating demand, planning capacity, and controlling costs; the latter, by creating the question whether rate levels should be adjusted to the needs of the strongest or weakest carriers or a composite of the industry as a whole.

c. *Technological change.* Without in any way belittling the strides that have been made by the public utilities and other forms of transportation in developing greatly improved techniques of production, the airlines present a unique situation among the regulated industries in this respect. Partly because of their competitive nature,

[50] *Id.*, Exhibit No. AA-6, Testimony of Nelson Lee Smith, and exhibits referred to therein, Oct. 25, 1957.

[51] 72 Stat. 754, 49 U.S.C.A. § 1371 (Supp. 1958).

[52] Cherington, *supra* note 28, at 18. See also CAB No. 8008, Exhibits Nos. AA-301-03, Feb. 27, 1957.

[53] In the Matter of the Western Union Telegraph Co., No. 11053, Initial Decision Made Final, FCC, July 30, 1958, pp. 76-77, the FCC held that the existence of competition alone warranted the allowance of a rate of return 25% higher than would normally be allowed noncompetitive utilities.

and partly because of the rapid march of technological development in the field of aeronautics noted earlier, the airlines must place orders for new equipment and related items far in advance of their delivery and at times when many factors bearing upon their performance and the markets which they will serve are necessarily rather speculative. These uncertainties, together with the magnitude of their financial commitments in relation to their present size, combine to give the airlines an appearance of greater-than-normal exposure to risk in the eyes of the investor.

d. *Capital turnover and operating ratio.* Railroads and utilities, with their relatively heavy investments in items of fixed capital, have typical rates of capital turnover of less than fifty per cent. The airlines, in contrast, turn over their capital about 1¾ times per year.[54] In this feature, they much more closely resemble unregulated industrial companies.[55] While a high rate of capital turnover is not, by itself, an indication of unusual risk, this does mean that the element of return constitutes a much larger portion of the total cost of production for the railroads and utilities than for the airlines, which, therefore, have a much smaller margin above expenses available for interest, dividends, and re-investment.

The operating ratios of the airlines are much higher than those of other regulated industries.[56] Obviously, therefore, the earnings of the airlines are more vulnerable and are subject to a greater degree of risk; in this respect, likewise, they are much more similar to industrial enterprises.[57]

e. *Vulnerability of profits.* Because of their combination of rapid capital turnover with high operating ratio referred to just above, the airlines are extremely vulnerable to quite small variations of revenue, expense, or both. To illustrate simply, assume an airline and an electric utility, each earning a six per cent return on an investment of $100,000,000, but the former turning its capital over 1¾ times a year and the latter only once in three years. Reductions of the revenues of the latter by five per cent, with no change in cost, would decrease its return by only 13.3 per cent, to 5.2 per

[54] Average composite ratios of revenues to investment for representative groups of regulated businesses, 1951-56, as shown in CAB No. 8008, Exhibit AA-401, Sept. 13, 1957, are as follows:

Domestic Trunklines	178%
Class I Motor Carriers of Passengers	149
Class I Railroads	38
American Telephone and Telegraph Co.	44
Natural Gas Pipelines	37
Class A and B Electric Companies	30

[55] Which, for the period 1939-56, turned over their capital at an average annual rate of 176%. *Id.*, Exhibit AA-469, Sept. 13, 1957, covering 195 representative industrial concerns.

[56] 1951-56 average composite operating ratios are shown in *id.*, Exhibit No. AA-901, Sept. 13, 1957, as follows:

Domestic Trunklines	95.1%
Class I Railroads	90.0
American Telephone and Telegraph Co.	87.1
National Gas Companies	86.0
Class A and B Electric Companies	81.4

[57] For the period 1951-56, 20 manufacturing companies had composite operating ratios which averaged 94.4%. *Id.*, Exhibit No. AA-902, Sept. 13, 1957.

cent; but a similar five per cent reduction of the revenues of the airline, again with no change in cost, would cut its return by seventy per cent, to 1.8 per cent.[58]

Not only are airline revenues—for competitive and other reasons—more susceptible of miscalculation than those of an electric utility, for example, but operating costs also are, as a practical matter, particularly open to upward pressure due to the large element of labor cost, which, in the case of the airlines, amounts to over fifty per cent of the total cash expenses.[59] When to these considerations are added the effects of small variations in load factors (which are to a very considerable extent beyond the control of management) upon both revenues and unit costs, it can be seen that airline profits are especially liable to unpredictable fluctuation.

f. *Instability of earnings.* All the factors thus far mentioned have made airline earnings highly unstable over the years, strongly supporting the view that a relatively high level of return should be permitted in order to compensate for such a great degree of uncertainty. While the proposition that the profit element derives from—and is related to—the assumption of risk is in accordance with the canons of orthodox economic theory,[60] it was deemed desirable in the instant proceeding to subject this maxim to factual test. Because of the problems of securing comparable data for unregulated businesses which would correspond to the "fair return" used for regulatory purposes, this was a matter of considerable difficulty. American suceeded, however, in assembling and analyzing a variety of financial data for the period, 1935-55 inclusive, covering 195 major unregulated concerns of interest to professional investors.[61] So far as we are aware, no such comprehensive study had ever been presented in a rate case before any regulatory agency.

Without laboring the details of this study, the concerns were divided into thirty-three industrial groups, and for each, the financial data were aggregated, with rates of return being calculated for each group in each year. For each industry, a simple average of the annual earnings rates and the average annual deviations from that average were calculated. These results were plotted, with the result that a definite and positive statistical relationship was shown between the levels and the instability of earnings.[62] Stable industries typically had lower earnings than unstable industries. But when airline data were plotted similarly, it was found that the industries—such as aircraft and automobile-manufacturing—which had earnings as unstable over the years as those of the airlines enjoyed levels of return about twice as high. In sum,

[58] The details of these calculations are set forth in *id.*, Exhibit No. AA-402, Sept. 13, 1957.

[59] *Id.*, Exhibit No. AA-321, Sept. 13, 1957.

[60] See, *e.g.*, FRANK H. KNIGHT, RISK, UNCERTAINTY, AND PROFIT (1921).

[61] For details as to the scope, methodology, and conclusions of this study, see CAB No. 8008, Exhibit No. AA-5, Testimony of W. Braddock Hickman, Oct. 25, 1957, and supporting Exhibits Nos. AA-500-04, Feb. 27, 1957, 800, Feb. 27, 1957, and 1201, Feb. 13, 1958. This unique material was also used extensively in *id.*, Eastern Air Lines Exhibit No. I-R, Testimony and Exhibits of Dr. Herbert B. Dorau, Oct. 11, 1957; *id.*, Joint Exhibit for Braniff, Capital, Continental, Delta, and Western, Air Lines, Exhibits and Testimony of J. Rhoads Foster, Oct. 25, 1957.

[62] Further corroboration of these conclusions has since become available. See Lanzillotti, *Pricing Objectives in Large Companies*, 48 AM. ECON. REV. 921 (1958); SIDNEY COTTLE & TATE WHITMAN, CORPORATE EARNING POWER AND MARKET VALUATION, 1935-1955 (1959).

the study furnished additional support for the twelve per cent rate of return sought, since that was approximately the average annual rate of earnings enjoyed by industries having similarly unstable earnings with which the airlines must compete for capital.

The testimony of a large number of independent financial experts was likewise to the effect that, for the airlines to raise the large amounts of capital which they required, investor confidence would have to be built upon far more stable and adequate earnings than they had enjoyed in the past.[63]

2. *Rate of return*

In further support of the need for a rate of return in the order of twelve per cent to reflect the risk characteristics of the industry, extensive and uncontroverted evidence of its capital requirements was presented, together with testimony as to the "cost of capital," which might assist the Board in arriving at conclusions on this point. It is recognized that there are weaknesses in the derivation of a fair rate of return based solely on the historical cost of capital to the enterprise, particularly when earnings-price ratios developed from market valuations are applied mechanically to the usually lower book values representing the equity.[64] The regulatory agencies, however, need some standard by which to judge the reasonableness of the dollar amounts or the rate of return sought in rate proceedings. If applied with a look to the future and as a basis for judgment, rather than as a strict mathematical formula grounded only in the past, "cost of capital" studies can be useful in this respect.

Accordingly, both the carriers and the Board's staff presented evidence from outside experts on this point. On both sides, the approaches had much in common, although the results differed, chiefly because of the use of different debt-equity ratios and different rates for both debt and equity capital. The principal expert witnesses for the carriers in this area[65] arrived at rates of return in the order of twelve per cent or more by using desirable future debt ratios of twenty-five to thirty per cent, although conceding that these would have to be exceeded temporarily, whereas the Board's witness used forty per cent.[66] The carriers' witnesses used a cost of four to five per cent on the debt, again looking to the future, against the Board's witness's four per

[63] For the Air Transport Association: Albert H. Gordon, Kidder, Peabody & Co.; James P. Mitchell, Chase Manhattan Bank; Frederick F. Robinson, National Aviation Corp.; Arthur H. Tully, Jr., Hayden, Stone & Co.; T. Carl Wedel, First National City Bank; and Percy S. Young, Jr., Prudential Insurance Co. For American: Benjamin S. Clark, White, Weld & Co.; Edwin H. Herzog, Lazard Freres & Co. For Braniff: Ferdinand Eberstadt, F. Eberstadt & Co. For Trans World: T. W. Fowler, Merrill, Lynch, Pierce, Fenner & Smith. For United: Franklin T. McClintock, Harriman, Ripley & Co.

[64] The writer's views in this respect have been expressed before the National Federation of Financial Analysts Societies, noted in 51 PUB. UTIL. FORT. 632 (1953). Logical circularity would be involved in arguing that rate regulation should be attuned to maintaining existing market values of securities; nevertheless, if competitive investor appeal is to be provided, equities must sell at substantial premiums above book value—the amount being a matter for expert judgment, not arithmetic. See also *Report of Committee on Corporate Finance*, in 70 PROCEEDINGS, NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS 57 (1958).

[65] For American, W. C. Gilman, CAB No. 8008, Exhibits Nos. AA-4, Oct. 25, 1957, 900-27, Sept. 13, 1957; for United, David A. Kosh, *id.*, United Air Lines Exhibit No. U-4, Oct. 25, 1957.

[66] *Id.*, Bureau Counsel Exhibit No. 120, Testimony and Exhibits of Paul L. Howell, Oct. 15, 1957.

cent maximum for the larger carriers and 4.8 per cent for the smaller.[67] The carriers' witnesses estimated costs of equity, after allowance for financing cost, market pressure, and so forth, were fourteen to fifteen per cent, as compared with the Board's witness's figures of 12.9 per cent for the four major carriers and 14.1 per cent for the smaller eight. On this basis, the Board's witness recommended rates of return in the range of nine to 9.7 per cent for the former and of 10.38 per cent for the latter.

In the brief to the examiner, however, Board counsel, using a debt ratio of forty-five per cent for the larger and fifty per cent for the smaller carriers, advocated rates of return of 8.9 per cent for the former and 9.45 per cent for the latter. At no point in the proceeding has it been explained just how these differential rates of return would be applied—even if the unit costs of the small carriers were as low as those of the large—in fixing fare levels in situations where, for competitive reasons, charges would have to be identical if all were to share in the traffic.

The Board's staff also took a position adverse to the substitution of the operating ratio for the rate of return as the standard in determining the reasonableness of carrier earnings. It was pointed out that regulatory commissions utilizing operating ratio for transit systems and motor carriers ordinarily relate their findings also to the rate of return to be produced—frequently at quite high levels because of the very small investments involved. It is not believed, however, that the same objections can be raised to the use made of the operating ratio by United as a check upon the supportable debt ratio in terms of a safe coverage of charges by earnings, or by American as a supplement to the rate-of-return approach indicating a dangerous shrinkage of the margin of profit which could require re-examination of the adequacy of the fare level.

3. *Investment base*

Whatever rate of return is selected, obviously the dollar earnings allowed—and hence the practical consequences of the "end result"—will be equally dependent upon the rate base used. In airline practice, it has been customary to look to the investment as shown on the balance sheet, rather than to the physical assets, as the measure of net investment. And in mail-rate and subsidy cases, commonly applying to past periods, the CAB has frequently disallowed deposits required to be made with manufacturers for equipment not yet delivered, on the grounds that such aircraft are not presently "used and useful" in serving the public.[68] The Board also has ordinarily determined net investment by averaging the balances at the beginning and end of the test period, thus "matching earnings and investment."

Whatever merit these practices may have in airline subsidy cases or in public-utility regulation when the reasonableness of past charges is at issue for the purpose of determining refunds, the airlines submit that they have no proper place in the

[67] The propriety of using 5% as the measure of the cost of new borrowing is borne out by the fact that American announced, April 15, 1959, the borrowing of $30,000,000 on notes due in 1996 and $40,000,000 on subordinated convertible debentures, both bearing interest at 5%. Aviation Daily, April 16, 1959, p. 334.

[68] *E.g.*, Pan American Airways, Transatlantic Mail Rates, 8 C.A.B. 267, 285-286 (1947).

present proceeding, where the question is that of determining the level of fares and earnings which will be permissible for a considerable time in the future. Some of the regulatory agencies have faced up to the prospective nature of rate-making and have allowed for foreseeable increases in plant and investment, either directly in fixing the rate base[69] or indirectly by allowing for attrition in the rate of return.[70]

In a protracted proceeding such as the General Passenger Fare Investigation, where the data of record cover a span of years in the history of an industry marked by continuing growth and confronted by vast increases of investment which are certain and imminent, not speculative or remote, there is every reason for using as the rate base not figures tied to averages in the past, but truly representing the funds and assets which will be devoted to the public service at the time when the fares to be prescribed will be effective.[71] The record is replete with specifics as to the firm capital commitments which the airlines have made. Determination of a forward-looking rate base, therefore, would not involve a great degree of either conjecture or difficulty. From the standpoint of sound administration, as well as equity, it seems clearly called for, since any other course could well result in fares which would be outmoded from the outset and, therefore, result in a further and unnecessary round of costly and time-consuming proceedings.

If the Board adopts this view of the matter and relates its findings to a rate base fairly reflecting the investment which the carriers must make to perform their continuing public-service obligation, the question of the treatment of equipment deposits can assume progressively diminishing practical significance. The further advanced the date as of which net investment is determined, the more of the aircraft represented by such deposits will have been delivered and placed in service. But on the merits, the fact is that, by long established industry-wide practice, any airline which wishes to secure and maintain a position on the manufacturers' schedules must conform to the requirements of progress payments during the course of manufacture which, at least in amount, duration, and impact, are unparalleled in the public utility field.

[69] See, *e.g.*, Illinois Commerce Comm'n v. Natural Gas Pipeline Co., 2 F.P.C. 218, 228 (1940), *aff'd.* 315 U.S. 575 (1942), wherein an estimated capital outlay of nearly $4,000,000 over a three-year future period was taken into account; *Re* Mountain States Tel. & Tel. Co., 1 P.U.R. 3d 129, 133 (Colo. P. U. Comm'n 1953), where, on the basis of past experience and plans in the immediate foreseeable future, $6,000,000 of plant under construction was included in the rate base; also *Re* Berkshire Street Ry., 88 P.U.R. (n.s.) 21, 25 (Mass. Dep't P.U. 1951); *Re* Consolidated Edison Co., 96 P.U.R. (n.s.) 194, 216-18 (N.Y.P.U. Comm'n 1952); *Re* Southwestern Bell Tel. Co., 2 P.U.R. 3d 1, 8-9 (Ark. P.S. Comm'n 1953); Public Util. Comm'n v. Peoples Natural Gas Co., 6 P.U.R. 3d 341, 348 (Pa. P.U. Comm'n 1954); *Re* Illinois Bell Tel. Co., 7 P.U.R. 3d 493, 502 (Ill. Commerce Comm'n 1955); *Re* Arkansas Louisiana Gas Co., 7 P.U.R. 3d 594, 599 (Ark. P.S. Comm'n 1955); *Re* Potomac Elec. Power Co., 8 P.U.R. 3d 76, 90 (D.C. P.U.Comm'n 1955); *Re* Union Tel. Co., 12 P.U.R. 3d 343 (Mich. P. S. Comm'n 1956).

[70] *E.g.*, *Re* Mountain States Tel. & Tel. Co., 2 P.U.R. 3d 75, 90 (Utah P.S. Comm'n 1953); *Re* Southern Bell Tel. & Tel. Co., 12 P.U.R. 3d 170, 197 (Tenn. P.S. Comm'n 1956).

[71] This is the approach which, perforce, has to be taken by agencies such as the FPC when it is reviewing the economic feasibility of an entirely new pipeline project or the extension of an existing utility. See, *e.g.*, Pacific Northwest Pipeline Co., 6 P.U.R. 3d 403 (FPC 1954); Texas Eastern Transmission Corp. and Texas Eastern Penn-Jersey Transmission Corp., 16 F.P.C. 27 (1956); and, of course, the CAB is confronted with similar situations in passing upon applications for new route authority.

In the case of a typical electrical system, for example, such payments would amount to not much over one per cent of its total fixed capital at any one time, and ordinarily would represent an even smaller portion. For the airlines, however, at particular stages of the re-equipment cycle now in progress, equipment deposits may amount to as much as a quarter or a half of their total net investment in flight and ground equipment. At December 31, 1958, American alone had on deposit with manufacturers more than $59,000,000, or over fifty per cent of its total net investment in flight equipment.[72] Furthermore, because of the lead-time required in securing aircraft, funds so advanced are tied up, in varying amounts, for periods of as much as three years. Thus, it is estimated that on the basis of present firm orders and progress payment schedules, American will still have in the neighborhood of $53,000,000 on deposit with manufacturers at the end of 1960, or nearly twenty per cent of its projected net investment in flight and ground equipment at that time.[73]

While some airlines have been able to supplement their internally-generated funds by outside borrowing in order to meet the requirements of the manufacturers for advance payments, the fact remains that, whatever their source, such deposits are as truly a necessary part of the "stock in trade" of the enterprise—and just as properly included in the rate base under the circumstances of this proceeding—as are any other portions of the investment. They are equally exposed to all the hazards of the business and are equally entitled to earn the over-all return found commensurate with such risk. Nevertheless, the Board's staff, relying largely on precedents developed in the altogether different setting of mail-rate and subsidy cases, recommends the exclusion of these items—estimated for the trunkline industry at June 30, 1958, as more than $182,000,000—from the rate base.[74]

As the result of these and other "adjustments," the 1958 year-end industry-wide rate base recommended by the Board's staff becomes some $200,000,000, or twelve per cent less than the investment recognized even by its outside expert witness.[75] Taking into account also the staff's scaling down of its expert witness's recommended rate of return, the 1958 return advocated by the Bureau falls more than $25,000,000 (20.7 per cent) for the industry, and over $5,500,000 (26.4 per cent) for American, below the results of his recommendations[76]—with the discrepancies, of course, becoming even larger when compared with the carriers' positions regarding the rate of return. Needless to say, it is the hope of the airlines that the Board will give more realistic recognition to the entire investment which they are, in fact, devoting to the public service. Unless this is done, upward revisions of the requested rates of return will

[72] AMERICAN AIRLINES, INC., ANN. REP., 1958, at 10, 17.

[73] CAB No. 8008, Exhibit No. AA-1107, Oct. 15, 1957.

[74] *Id.* Brief of Bureau Counsel to the Examiner, Oct. 29, 1958, p. 267, n. 42. Some slight concession is indicated in the direction of permitting the capitalization of some element of interest on equipment deposits covering equipment to be delivered in the future, to a degree simulating the treatment of "interest during construction" in public-utility regulation. For the reasons stated in the text, however, it is believed that the two situations are so different, in magnitude and impact, that such relatively minor allowances would fall far short of meeting the problem.

[75] Derived from CAB No. 8008, Exhibit BCR-930, 2d rev., Nov. 11, 1957.

[76] *Ibid.*

be necessary to produce the dollar "end result" required by the airlines for competitive equality in the capital market.

4. *Projections of revenues and expenses*

Both the carriers and the Board's staff assert agreement on the principle that the entire case should be viewed not from a "keyhole" approach giving undue weight to temporary or atypical conditions in the past, but from an informed appraisal of what can reasonably be expected in the foreseeable future. In the application of this approach to projections of revenues and expenses through 1961, however, they are far apart. It is, of course, the duty of any regulatory agency to scrutinize carefully the estimates of costs and revenues submitted by the subject companies to determine whether they are reasonable and supportable in terms of what can be expected of honest and economical management. In so doing, they ordinarily use the immediate past as a guide and then try to give appropriate weight to "known changes" and those which may reasonably be anticipated. Nonrecurring items of both revenue and expense are, of course, excluded.

It is recognized, however, even in the relatively simpler areas of electric, gas, and telephone rate-making—where the commissions are dealing with the forecasts of but a single, noncompetitive supplier—that rate-making involves "a residual difference between two estimates. . . . If actual revenues received or actual operating expenses should deviate . . . in only small degree, the resulting effect on return could be very considerable."[77] Because of this, and because of the fact that both the expertise and the responsibilities of regulator and manager are vastly different, the former usually proceeds with caution in substituting its judgment for that of the latter. "Adjustments" of the good-faith forecasts of management, therefore, are not made unless well-supported by convincing proof; and ordinarily they are relatively small in relation to the totals involved. In the case of the airlines, where severe competition exerts a powerful check on the course of costs and where the present is so precarious and the future so uncertain, the exercise of such caution and restraint would appear particularly appropriate. Nevertheless, in the instant proceeding, the Board's staff has attacked the estimates of the carriers with what seems to resemble reckless abandon.[78]

Speaking broadly, the "adjustments" proposed by the Board's staff fall into four crucial areas, in addition to those of rate of return and rate base, which have been dis-

[77] United Fuel Gas Co., 12 F.P.C. 251, 270 (1953).

[78] In the earlier stages of the General Passenger Fare Investigation, it appeared that the Board's staff was preparing to contend that since at times in the past certain carriers had enjoyed substantial capital gains from the sale of used flight equipment, possible future gains of this character should be included in the projections of revenues. To this, the airlines took strong exception, pointing out that not only would any such gains have no proper place among the operating revenues to which fares are related, but also that the uncertainties surrounding the disposition of large numbers of piston-engined aircraft upon their supersession by jets made any estimates of gains from this source little more than wild guesses. It now appears that Bureau counsel has arrived at a position close to that of the carriers—*i.e.*, that any net capital gains which may materialize should be viewed merely as a potential cushion in meeting the airlines' capital needs, and should not be relied upon for rate-making purposes.

cussed above. These involve the treatment of depreciation expense, income taxes, load factor, and passenger revenue yield.

a. *Depreciation.* As to depreciation, so far as projected costs associated with the new turbine-engined equipment are concerned, the carriers and the Board's staff differ only with respect to the engines. On the airframes, ten-year service lives and fifteen per cent residual values are acceptable to both. The Board's staff would use the same basis for the engines; the airlines, however, anticipating early and substantial engine improvements, would use service lives of only five years, with a fifteen per cent residual value for the jets and zero residual value for the turboprop engines. Engineering developments to date fully support the judgment of the carriers in this respect.

On piston-engined aircraft, the carriers generally have used for accounting purposes seven-year service lives and ten per cent residual values, without objection by the Board or its staff until recently, when an unsuccessful effort was made to prescribe uniform depreciation rates based on higher residual values.[79] For American, for example, this meant that its DC-7 aircraft would be written off the books in 1961, except for those delivered in 1956, 1957, and 1958. As to these, American had established shorter service lives so as to bring about a substantially common retirement date, since it was anticipated that the entire fleet of this type aircraft would become obsolete for its use with the transition to full jet operation.

Although the Board's staff's position seems to have undergone several changes during the course of the case, in computing projected costs per available ton-mile, it has used an over-all industry figure of 2.45 cents for flight equipment depreciation,[80] which is only about seventy-three per cent of the amount estimated by the carrier to be required. Obviously, the exposure of the carrier and its stockholders to retirement losses would be greatly increased if fares were to be based on a grossly inadequate provision for depreciation. No such drastic revision of managerial judgment should be made without much more convincing evidentiary support than can be found in the record.

b. *Income taxes.* Advantage has been taken by the carriers generally of the provisions for "liberalized depreciation" and "accelerated amortization" contained in sections 167 and 168 of the Internal Revenue Code of 1954. They contend that there is nothing in the legislative history of these sections which indicates an intent to discriminate against regulated businesses or to deny them the benefits which Congress intended. It is their position that the result of utilizing these methods is a deferral, not a saving, of income taxes.[81] Accordingly, they have "normalized" their charges

[79] The courts have held that the CAB lacks authority to prescribe depreciation, Alaska Airlines v. CAB, 257 F.2d 229 (D.C. Cir.); *cert. denied*, 358 U.S. 881 (1958). American has, nevertheless, adopted for accounting purposes the Board's position as to residual values, but not as to the service lives of these aircraft. AMERICAN AIRLINES, INC., ANN. REP., 1958, at p. 19, n. 9.

[80] CAB No. 8008, Exhibit BCR-850, 3d rev. July 22, 1958.

[81] Relying largely upon the practices of the FPC and a number of state regulatory agencies. See, *e.g.*, Panhandle Eastern Pipe Line Co., 3 P.U.R. 3d 396 (FPC 1954), *remanded on other grounds*, City of Detroit v. FPC, 230 F.2d 810 (D.C. Cir. 1955); Amere Gas Util. Co., 15 F.P.C. 760 (1956); *Re* Okla-

for depreciation on the books and have earmarked the tax difference in reserves for deferred income taxes.

The Board's staff does not now quarrel with the principle of normalization in so far as accelerated amortization under section 168 is concerned, but it does object to the same procedure as to liberalized depreciation under section 167.[82] In the case of American, the impact of this adjustment, when combined with the Board's recommended rate base and rate of return, is to reduce the projected cost per available ton-mile to 1.89 cents, or only about forty per cent of the unit cost projected by the carrier, in this category.

c. *Load factor.* In making its long-range estimates of revenues and expenses, American has used a sixty-five per cent load factor, while the Board's staff has employed a "reasonably attainable" figure of sixty-seven per cent. Although this may, at first glance, appear to be but a slight difference, the fact is that, in terms of the projections of this one carrier alone, each load factor percentage point represents 105,000,000 revenue-passenger-miles, or $5,600,000 annually at 1957 fare levels and $6,400,000 at the fare levels requested in the proceeding.

Here, again, of course, is a matter which involves expert judgment, not one of demonstrable fact. The Board's staff's position is grounded primarily on carrier performance during a five-year period in the past, when the character of service was deemed adequate and efficient, and on the proposition that management can closely control the results of operations in this respect. As a matter of operational and financial planning and efficiency, every airline must watch its load factors closely, and on a segment-by-segment basis. If they fall too low, operations are unprofitable; if they rise too high, service suffers because of inability to carry passengers where and when they want to travel. But here there are numerous elements which inhibit the ability of management to keep its load factors at the precise levels which might be most desirable from the standpoint of profits.

One of these limitations is the fact that seats have to be added or eliminated in groups representing the capacity of the aircraft: forty, sixty, eighty, or, with the jets, 100 or more. Thus, changes of schedules—quite apart from their impacts upon the convenience of the traveling public and, therefore, upon total demand—cannot be finely adjusted to minor variations of traffic volume which affect resulting load factors. Another is the fact that because of their public-service obligations as well as

homa Natural Gas Co., 12 P.U.R. 3d 293 (Okla. Corp. Comm'n 1955); *Re* Public Service Co., 12 P.U.R. 3d 509, 515 (Ind. P. S. Comm'n 1956); *Re* General Tel. Co., 14 P.U.R. 3d 243 (N.M. State Corp. Comm'n 1956); *Re* La Crosse Tel. Corp, 20 P.U.R. 3d 94 (Wis. P. S. Comm'n 1957); *Re* Western Ky. Gas. Co., 21 P.U.R. 3d 394, 399-400 (Ky. P.S. Comm'n 1957); *Re* Alton Water Co., 22 P.U.R. 3d 358, 364-66 (Ill. Commerce Comm'n 1958); *Re* Michigan Cons. Gas Co., 22 P.U.R. 3d 369, 377-79 (Mich. P. S. Comm'n 1958); *Re* Empire Dist. Elec. Co., 23 P.U.R. 3d 45, 49-53 (Kan. State Corp. Comm'n 1958); *Re* United Tel. Co., 23 P.U.R. 3d 68, 75-77 (Wyo. P.S.Comm'n 1958). See also Guercken, *Economic and Regulatory Aspects of Accelerated Depreciation*, 58 PUB. UTIL. FORT. 145 (1956).

[82] The writer is unable to distinguish between these provisions, in terms of legislative intent, in so far as their regulatory aspects are concerned. See, *e.g.*, House Comm. on Ways and Means, *Internal Revenue Code of 1954*, H.R. REP. No. 1337, 83d Cong., 2d Sess. (1954); Senate Comm. on Finance, *Internal Revenue Code of 1954*, S. REP. No. 1622, 83d Cong., 2d Sess. (1954).

for competitive reasons, there is an irreducible minimum level at which service must be maintained if a carrier is to remain in a given market. Furthermore, the necessity of achieving efficient utilization of available aircraft and of locating equipment where it is needed limits scheduling flexibility, as does the need for providing convenient through service and connecting schedules, apart from the local traffic on the particular segment in question.

These are some of the factors with which management has to contend in tailoring its schedules to meet the public need. And all are reasons why actual results in the uncertain future of the jet age may fall considerably short of what might theoretically be possible in terms of different conditions which have prevailed in the past. Again, the record affords no substantial basis for upsetting the judgments of management, based upon detailed segment-by-segment analysis, as to probable load factors in the future.

d. *Passenger revenue yield.* In projecting revenues into the future, the Board's staff has applied to forecasted traffic the current yields per passenger-mile. Some carriers, on the other hand, have taken into consideration the depressing effect upon this average of the anticipated increase in the proportion of traffic which will be represented by coach travel at lower fares. In the case of American, the difference per unit again appears small—only 0.05 cents per passenger-mile—but in the aggregate, it becomes substantial—more than $3,400,000 annually in terms of the average traffic level projected over a three-year period.

Since coach traffic has grown at a much greater rate than first-class traffic in recent years, and since the record shows that the equipment and scheduling plans of the carriers definitely provide for the continuation of this trend, it seems clear that here we have a matter which can be characterized as the type of "known change" that the Board cannot reasonably disregard.

Taking all these "adjustments" into account—together with others which, because their impacts are less significant, have not been noted here—we find that, in the case of American, they amount in toto to reductions of projected passenger costs per available ton-mile of 3.01 cents (or 0.79 cents per revenue-passenger-mile) and to increases of projected passenger revenues of 1.05 cents per available ton-mile (0.05 cents per revenue-passenger-mile). Translated into total dollars on an annual basis, this represents for American a total dollar difference of about $58,000,000;[83] a comparable figure for the domestic operations of United is approximately $65,000,000.[84]

V

CONCLUSION

Unfortunately, the limitations of space make it impossible to explore other interesting facets of the problems presented to the airline industry and the CAB in the General Passenger Fare Investigation. Among them are the questions, how can a

[83] CAB No. 8008, American's Brief to the Examiner, Oct. 29, 1958, p. 116.
[84] Information furnished by United Air Lines in response to the writer's request.

comprehensive proceeding such as this be brought to a conclusion within a shorter time-span than over three years, during which there is always a danger that much of the record will become stale and of diminished usefulness; and how, after differences between the carriers and the staff of the magnitude indicated above have been resolved by the examiner and the board, should the results be applied to the fare level—whether in terms of the needs of the strongest carriers, upon the requirements of the weakest carriers, or upon some composite or "bellwether"[85] basis.

Another matter which it has not been possible to explore is the weight which should be accorded to "value of service" considerations in a proceeding involving the general level of fares. In the instant case, there has been some probing into the probable elasticity of demand, with the carriers contending that, within the limits of the general increases sought, there is no reason to suppose that traffic would be adversely affected. This, no doubt, is a matter which will be more directly at issue in such fare relationship proceedings as may follow the conclusion of the General Passenger Fare Investigation.

It is hoped, however, that the foregoing pages will have served to convey to the reader an understanding of the basic issues present in the pending case, which is of such vital importance to the future of the airline industry in the United States. As stated toward the outset, it is the writer's view that a proper application of the "fair return" concept will afford sufficient flexibility for the sound resolution of these issues. What seems to require recognition, above all else, is the fact that, in applying established principles of regulation to the airlines, due weight should be given to the characteristics which distinguish them from the usual types of public utility.[86]

ADDENDUM

Shortly after the foregoing article was submitted for publication, Examiner Ralph L. Wiser issued, on May 27, 1959, his initial decision in the General Passenger Fare Investigation. Because the issues in the proceeding are referred to so extensively in the article, it is believed that the following brief summary of the examiner's opinion will be of interest and service to the reader.

While the examiner's conclusions differ in some respects from those of the article, there is a remarkable similarity in these two analyses of the basic problems presented by the case. Thus, the examiner applies to airline fare regulation the "fair return" approach, holding that rate of return on investment is a legal, practicable, and efficient standard for measuring risk in this setting, and that operating ratio or return margin—while a useful tool in appraising variations in earnings—cannot be taken as the measure of the reasonableness of charges independently of the return on investment which they will produce.

[85] In the Matter of Western Union Telegraph Co., No. 11953, Initial Decision Made Final, FCC, July 30, 1958, pp. 48-55.

[86] "The airline industry is in many respects different from the usual public utility, and I feel that sound regulation requires careful consideration of its peculiar characteristics." Address of CAB Member Louis J. Hector, *Problems in Economic Regulation of Civil Aviation in the United States*, before the New York Society of Security Analysts, Nov. 28, 1958.

In applying this standard, the examiner concludes that due to competitive factors and earnings instability, the airlines are in a much greater risk position than are the conventional nontransportation utilities and, therefore, require a substantially higher profit allowance. Based upon the evidence as to costs of capital and prospective debt-equity ratios, he finds that an over-all industry rate of return of 10.6 per cent would be fair; but he recognizes that a uniform and stable fare level would inevitably lead to somewhat divergent results from carrier to carrier and from time to time. Accordingly, he concludes that five-year average returns ranging from ten to twelve per cent would be reasonable. In support of this view, he holds that "the continued health of the air carriers is more important to the public interest than any squeezing of a small number of percentage points out of the fare level."

The examiner would allow his fair rate of return on a "prudent investment" rate base derived from the right-hand side of the balance sheet and excluding only those items of net investment found to be dishonest or obviously wasteful or imprudent expenditures. Having found the jet acquisition programs of the carriers to represent honest, economical, and efficient management, he reasons that equipment deposits prudently made are to be recognized as part of the rate base. Reserves for deferred federal income taxes are excluded as not representing investment by the stockholders or contributors of debt capital. Among the expenses to be recognized for rate-making purposes, however, federal income taxes are calculated on the basis of straight-line depreciation, regardless of the "accelerated" or "liberalized" methods used in computing the tax currently paid, thus giving effect to the congressional intent to confer a tax benefit.

In general, the examiner finds the operating plans, the traffic and revenue forecasts, and the load-factor estimates of the carriers to be reasonable. He rejects the CAB staff's proposed use of standard costs and load factors for a hypothetical future period as unjustified from the standpoint of either law or economics, and in this connection, he relies heavily upon the holding of the Court of Appeals for the District of Columbia in *American Overseas Airlines, Inc. v. CAB*,[87] to the effect that the Board is not free to substitute its tests for those of the statute, or its standards for the managerial judgments and expense forecasts of the carriers, unless their operating plans are shown to be dishonest, inefficient, or uneconomical. He holds that the carrier estimates of future unit costs are somewhat too high—principally because he believes that increased productivity will be a stronger factor than rising prices during the next few years—and that depreciation on flight equipment should be treated on a uniform basis, resulting in some downward revisions of carrier figures for piston-engined equipment, although he does not suggest as drastic reductions as those proposed by the staff.

Based on his analysis of the various facets of the case, the examiner finds that the general level of domestic trunkline air fares should be increased by twelve per cent above the level in effect prior to February 10, 1958. To bring about this result,

[87] 274 F.2d 744 (D.C. Cir. 1958).

RETURN ON INVESTMENT

DOMESTIC TRUNKLINES-DOMESTIC OPERATIONS
FIRST NINE MONTHS 1959—FIRST NINE MONTHS 1958
(THOUSANDS)

	FIRST NINE MONTHS 1959			FIRST NINE MONTHS 1958		
	Net Profit Before Interest and After Taxes Excl. Capital Gains	Average Domestic Investment	Return on Investment	Net Profit Before Interest and After Taxes Excl. Capital Gains	Average Domestic Investment	Return on Investment
American	$14,496	$ 282,982	6.8%	$12,611	$ 201,631	8.3%
Eastern	7,723	206,471	5.0	9,599	172,594	7.4
Trans World	11,878	131,041	12.1	2,737	128,448	2.8
United	15,672	256,884	8.1	12,567	207,445	8.1
Subtotal	$49,769	$ 877,378	7.6%	$37,514	$ 710,118	7.0%
Braniff	$ 2,455	$ 45,753	7.2%	$ 2,000	$ 43,786	6.1%
Capital	888	61,548	1.9	1,959	63,225	4.1
Continental	2,257	53,509	5.6	383	34,384	1.5
Delta	3,073	66,209	6.2	1,695	59,334	3.8
National	1,434	61,265	3.1	411	41,706	1.3
Northeast	(2,717)	24,456	(14.8)	(4,751)	19,417	(32.6)
Northwest	2,851	62,167	6.1	1,249	45,170	3.7
Western	4,228	41,772	13.5	(898)	34,427	(3.5)
Subtotal	$14,469	$ 416,679	4.6%	$ 2,048	$ 341,449	0.8%
Total Trunklines	$64,238	$1,294,057	6.6%	$39,562	$1,051,567	5.0%

( ) Denotes Loss.

Notes: (1) *Investment*—Corresponds with method of Examiner Wiser in the General Passenger Fare Investigation (long-term debt and stockholder's equity allocated to domestic operations on the basis of the ratio of domestic to total operating expenses; equipment deposits are included, reserves for deferred income taxes are excluded).

(2) *Net Profit*—First nine months 1958 - includes 4% + $1 only from February 10.
First nine months 1959 - includes discount elimination and jet surcharges.
Capital gains less income taxes at 25% are excluded from the net profit.

(3) *Rate of Return*—Compares with Examiner Wiser's recommendation of 10.25% for the "Big Four" and 11.25% for the "Smaller Eight" and 10.6% for the industry.

Source: Form 41's submitted to the CAB.

he recommends that the temporary increases granted during the course of the proceeding (four per cent plus one dollar per ticket, effective February 10, 1959, estimated to increase industry revenues by 6.6 per cent, and the various discount eliminations and reductions, effective October 20, 1958, estimated to represent a 3.5 per cent increase) and then due to expire July 31, 1959, be made permanent. To meet the remainder of the carriers' needs, he suggests the addition of a further surcharge of one dollar per ticket, plus such small percentage changes in the present fare level as might turn out to be required. He concludes that such a modest fare increase would not have a substantial adverse effect on the volume of traffic.

Exceptions to the examiner's initial decision were filed June 8, and briefs to the Board July 15, with oral argument held on July 28 and 29, 1959. In the interim, the Board announced, by press release dated June 18, that it would permit extension of the expiration dates on the tariffs conferring temporary relief from July 31 through December 31, 1959, to preserve the status quo pending final decision in the General Passenger Fare Investigation.

Despite repeated references by the Board to the fact that this was to be an expedited case, its opinion and order disposing of this 3½-year-old proceeding have not yet been issued, nor is there any present indication as to when they will be. Although the earnings of the domestic trunklines for 1959 to date are, on the whole, considerably better than they were during the corresponding months of 1958 (due in part to the resumption of high rates of traffic growth and in part to increased revenue yields resulting from the interim fare relief granted by the Board and from the jet surcharges collected by the carriers which have thus far inaugurated jet service), they are still below the levels found reasonable by the examiner.

The above table shows that, for the first nine months of 1959, net profits (excluding capital gains and taxes related thereto) before interest and after taxes were generally more satisfactory than for the corresponding period in 1958. Using the same method of computing the investment rate base as that followed by the examiner, rates of return rose from seven per cent to 7.6 per cent for the "Big Four," from 0.8 per cent to 4.6 per cent for the "Smaller Eight," and from five per cent to 6.6 per cent for the domestic trunkline industry as a whole. But these ratios were still far short of the 10.25 per cent, 11.25 per cent, and 10.6 per cent, respectively, which he found appropriate.

With continued increases in traffic, those earnings are likely to improve further, but it would appear that there is still room for the additional fare increases which he recommended for consideration. And the behavior of the traffic under the interim increases and jet surcharges already made effective indicate that the demand is sufficiently inelastic to permit this.

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